Introductory Address

DELIVERED IN THE

UNIVERSITY OF GLASGOW,

To the Students of Medicine of the Session 1882–83.

BY W. T. GAIRDNER, M.D.,

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GENTLEMEN,—I appear before you to-day at the request of my colleagues, not, certainly, without a feeling of satisfaction and even pleasure in my task, but also with a most serious sense of responsibility. Only on two previous occasions has it fallen to my lot to address to medical students the very first words of exhortation at the opening of a new session—once in Edinburgh, in 1856, and once in Glasgow, in this university, but not in these halls, in 1866. When we consider that sixteen years have elapsed since the last of these occasions, and that during this interval almost all of my then colleagues in the Medical Faculty have either been taken from us by death, or have passed into an honourable retirement, the very facts themselves seem to raise the question, Where shall we all be after another sixteen years? And although I am assuredly not bound to answer this question, and have no personal misgivings leading me to despair of being permitted to labour for some years to come on your behalf, yet it cannot but be present to my mind that this *may* be the last occasion for me, as it is the first for some of you, on which words like those I have it in my mind to speak may remain to be spoken between us. Let us, therefore, strive together to make the present occasion one which we may look back upon, if God will, as tending to confirm in us whatever of good, honest purpose we are conscious of having devoted to our work in the past; and not devoid, also, of some new inspirations or glimpses of insight as regards the unknown future that is before you, and equally before all of us, your teachers. I am sure that I speak the mind of all of them when, in welcoming you anew to these benches, we add the expression of an earnest desire, or prayer, that we may also be enabled to perform our share in the duty aright, and that the good work done and the friendly associations formed during the session of 1882–83 may be of such a nature as to be an abiding influence for good over all the years to come.

In considering the materials before me for a new Introductory Address, it is impossible to avoid looking back for a moment on these two former addresses. I would fain not absolutely repeat myself, and yet there is much of what falls to be spoken which could only be spoken again in similar, if not identical, words to those already used. It would not be altogether impossible, perhaps, to commit this justifiable plagiarism without a chance of detection, on the present occasion. For introductory addresses are, like the occasions that give rise to them, soon forgotten, at least by all who are not immediately concerned in them. But I am not without hope that such reminiscences as cling to my own mind of these earlier addresses may be turned to account, not for the purpose of reproducing their ideas, but rather of inquiring how far the progress of the medical art has, in any degree, confirmed or controverted the impressions entertained of it by a teacher sixteen or twenty-six years ago. And with this view I intend, as soon as possible, perhaps in a few days, certainly some time between now and Christmas, to place at your disposal the whole of these addresses, including the present, so that you may at your leisure, if so minded, follow out with more full understanding and appreciation the few suggestions, imperfectly expressed as I fear they will be, called forth by the present occasion.

And while in this retrospective mood, I am reminded that only the other day we had set before us, in the shape of a leader in *The Times*,[1] and in connexion with the opening this month of the various medical schools in London, a singularly clear and luminous appreciation of the changes introduced into medical study and practice in England, as the consequence of the Medical Act of 1858; from which anonymous, but not unauthoritative, statement it may be admissible to borrow a few sentences as an illustration of our present position; keeping in view always that the writer of the article in question, well informed and thoroughly impartial as regards his own division of the United Kingdom, has had England, and apparently England alone, in view, in describing the state of medical education before 1858, and the changes gradually effected, owing to the legislation of that year. Were one at liberty, indeed, to guess (for everyone knows we can do no more) at the authorship of that particular article, to see with the mind's eye the Vulcan that forged the thunderbolt of Jupiter on that particular morning, I should be disposed to say that, judging from internal evidence alone, the brain that guided the hand that wrote that particular article was also one of the most active of those recently at work in elaborating the report of a Royal Commission appointed to inquire into the Medical Acts, with a view to their consolidation and amendment. If this be so, it gives, for us, an additional interest to the sentences of that article which I shall presently lay before you; and although it is by no means my intention to make this address in any respect a political or controversial one, it is certainly a fact to be noted that an Englishman, presumably well acquainted with the facts, and speaking of England, and for England alone, in the columns of *The Times*, should employ the following expressions as regards the state of medical education a year or two before the passing of the Medical Act of 1858, and yet a year after my first introductory address to medical students in 1856:—

"Five-and-twenty years ago, except in the case of the small number of men who graduated in medicine at Oxford or Cambridge with a view to consulting practice as physicians, the education of a medical student commenced by an apprenticeship to a licentiate of the Apothecaries' Company, which was then the chief source of the medical qualifications of general practitioners. The apprenticeship was rendered necessary by the Act of 1815, from which the Company derived its powers, and it usually commenced at about the age of fourteen years, so as to break prematurely into school education. The first year of the apprenticeship was often spent in the work of a surgery boy, varied by the preparation of medicines, and by the attainment of some knowledge of their properties. The later years were devoted to learning the business of conducting a medical practice, the art of talking to patients, and so forth; and, when the apprenticeship was concluded, a short term of hospital study formed a prelude to the single examination which, when passed successfully, permitted the candidate to work his will upon the sick under the protection of the law. Originally, the full term of five years' apprenticeship was served in the house of the master; but as the term of hospital study[2] was gradually extended from one year to nearly three, the two demands were found to consume an inordinate amount of time, and the last two years of apprenticeship were commonly remitted, and were suffered to form part of the period of hospital study. Even then the total period of professional as distinguished from general education extended over about six years; and, as the examination might be passed at the age of twenty-one, was usually commenced not later than fifteen."

I interrupt the quotation at this point simply to say that one has to go back a long way in the history of medical education in Scotland to find a state of matters at all resembling the one here described. We had our errors and deficiencies, no doubt, and to some of them I shall allude more or less distinctly before I have done; but at no time within my recollection, nor, I think, within the recollection of those who preceded me, and whom I remember as my own instructors, was it even possible in Scotland to mistake a "surgery boy" of fourteen, prematurely withdrawn from school in order to manufacture pills and potions, and run errands, and make himself generally useful in a "shop" where he was under indentures to an "apothecary," for a regular student of medicine. To whatever extent the apprenticeship system held its ground in Scotland twenty-five or even fifty years ago (and far be it from me to say that in the hands of such men as Abercrombie, and others like him, it was not a system capable of much good), it was always

[1] October 3rd, 1882.

[2] To a reader unaccustomed to the phraseology here employed, it may be necessary to explain that "hospital study" throughout this quotation corresponds to what in Scotland would be called regular medical study within the curriculum, whether in hospital or not. In the London schools, which are all attached to hospitals, this is well understood, but not so in Scotland.

controlled by a regular academic discipline, emanating mainly from the universities, but largely reinforced, I am bound to say, by the coördinate influence, and often rivalry, of some of the corporations in building up what is now called the medical curriculum. In Scotland, at the period here referred to, a medical student so-called, was rarely less than seventeen, or, at the very earliest, sixteen years of age; and he was bound at the very outset to constitute an *annus medicus*—i.e., to engage in an amount and kind of real study which effectually precluded the possibility of his being allowed to run wild as a "surgery boy," such as is alluded to in *The Times'* article; a type from which the Bob Sawyer, and Ben Allen of Dickens' well-known story was only a too natural outgrowth. I venture to claim for the Scotch medical student of twenty-five years ago, even while admitting many deficiencies in his education both general and professional, that he was (saving a few sad exceptions) for the most part not only bound over to learn, but really in earnest in learning, the scientific as well as the practical work of his profession; that he was not devoting days or years which should have been occupied by ordinary school training, to "the preparation of medicines, and the attainment" (by chance) "of some knowledge of their properties;" but that he was, as I hope and believe you are, seriously impressed with the need of really scientific training as a foundation, and actually carrying out such training in anatomy and chemistry, even during his first year. Moreover, it lies strictly within my personal experience in 1856, when I had already taught several classes of Practice of Medicine, some of them numbering more than 120, to declare that the type of medical student existing at that time in Scotland was one which it was quite easy and natural for me to address as an assembly, not of undisciplined schoolboys out of school, but as "gentlemen" preparing, not without the solemnity and gravity proper to men, for the great business of life. I will add that this has been my uniform experience of medical students as a class from first to last; and I appeal to the words of both my introductory addresses in proof of the fact. I affirm that it would have been practically impossible to use the words of these two addresses, seriously and sincerely, to a body of men in whom the Bob Sawyer element formed any considerable intermixture; and I claim for our Scottish system of university and other regular medical education whatever credit may accrue to it from that fact.

I now return to the quotation from *The Times;* but what remains of it, though most important to us, is very short:—"The Medical Act of 1858 introduced changes by which apprenticeship was abolished and the hospital course extended to four years, so that up to the age of seventeen school education might be continued. In order that the opportunity thus given might not be neglected, the student was required to pass an examination in general knowledge before he was permitted to commence his hospital career, and two professional examinations were instituted in place of one. The general result of the change was to occasion a marked advance in the intellectual status of students and of young practitioners. They lost, it is true, the familiarity with the management of a practice which apprenticeship was calculated to afford, and they lost opportunities of seeing many common forms of disease which are hardly severe enough to enter hospitals, but they gained more than an equivalent for these losses in their better education and their greater self-respect. They gained an advance in intellectual training which rendered them better able than their predecessors to grapple with the complicated problems so often presented by disease."

It thus appears that the changes introduced by the Medical Act of 1858 into English medical education were in a great measure those which had been in operation in Scotland long before, under the influence of our three teaching universities, and the medical schools associated with them in Edinburgh, Glasgow, and Aberdeen. Not that I wish you to infer that our state was all that could be desired, or even all that, under more favourable conditions of medical legislation, it might have become. The Apothecaries' Company, which I by no means wish to disparage, inasmuch as it has honourably striven to fill a position left to it by the other corporations, and thus to maintain the organisation of the medical profession in England, long enjoyed a practical monopoly for its licentiates of most of the offices in that division of the kingdom which formed the usual introduction to general practice. The Royal College of Physicians during the same period long declined to admit, even as licentiates, any but the graduates of Oxford or Cambridge, thus aiming at a degree and kind of exclusiveness which effectually barred all possibility of its becoming the college of the medical profession. The Royal College of Surgeons, with a much more generally accessible, and therefore more popular, diploma, confined its whole attention to anatomy and surgery, under the theory that the other branches of a complete medical education were the province of the sister college, or of the apothecaries. Hence the anomaly of the "double qualification" which distinguishes England from almost every civilised country in Europe, for it involves the still more serious anomaly of the "single," or, as it may justly be called, the *half*-qualification, in virtue of which a man may enter into practice capable of performing operations, but entirely ignorant of medicines, and the diseases requiring their use; or, *vice versâ*, capable of dispensing medicines, but almost entirely ignorant of anatomy and of surgical operations; and in either case far too much of a mere craftsman, far too little of an educated professional man.

The Scottish universities early perceived this anomaly, and long before the Medical Act of 1858 was passed, a regular curriculum of study had been instituted which was unquestionably (though still defective in many points) far more complete than anything hitherto attainable in Great Britain as a qualification for general practice. Not only so, but by a preliminary training in what we should now call the elementary biological sciences, botany, natural history, chemistry, comparative anatomy, and physiology, the mind of the student was opened to more than merely utilitarian views of his profession; the "surgery-boy" type, to which I have already alluded, was effectually eliminated, and replaced by a far higher kind of professional culture, founded upon a broad and generous estimate of the utmost that was then held possible between the ages of seventeen and twenty-one, to fit a man for the practice of every department of a profession which requires, and fully engages, all the energies of a well-disciplined intellect. It is true that in respect of what may be called scholastic training the Scottish graduates were often found deficient; the trifling modicum of Latin which in my time represented the whole of the non-professional culture required being a very poor substitute for the M.A. degree of Oxford and Cambridge, or any of the other insignia of the ideal academic man. True, also, that on the other side it was sometimes objected that the Scottish graduate in medicine was not sufficiently conversant with the details of compounding and dispensing powders and pills and mixtures, and, above all, draughts (at 2*s.* 6*d.* a piece) to be taken two, three, four, or five times a day; in other words, that he had not sufficiently mastered the technical details by which his neighbour, the English apothecary, was able to accomplish the great ideal of the developed "surgery-boy" type—the dispensing of immense quantities of "physic" in the most complicated prescriptions, to pass unquestioned down the willing throats of Her Majesty's lieges. But in spite of these two grave deficiencies, and perhaps many more in detail, of a more real character than either of them, the Scottish University medical graduate has struggled on, with every precedent and every national prejudice against him, to a position of great credit and influence in the sister kingdom; and what is far better than that, to a more and more elevated conception of his art and the sciences on which it rests. The cause of this gradual elevation of his ideal is that the universities, which did not wait for the Medical Act of 1858 to make a beginning, were, nevertheless, fully prepared to advance with the times, and carry out as rapidly as possible all the improvements suggested by that Act and by the Medical Council which it created. A Royal Commission, appointed in 1858, in accordance with the Universities (Scotland) Act, enabled them greatly to improve their internal organisation, just at the time when the Medical Act was initiating the revolution in English medical education and practice to which I have already referred. And now we are able to cite the very words of another Royal Commission, to show that our labours have not been in vain. "We readily acknowledge," write the Commissioners on the Medical Acts in 1882, "all that the Scottish Universities have done for medical teaching and examination, and we should hesitate to make any recommendation which, in our belief, would interfere with their usefulness or prosperity. We do not propose to interfere in any way with their teaching, nor do we believe that students will cease to recognise the cheapness and excellence of their teaching." These, gentlemen, are not the words of Scotsmen, or of Scottish graduates; for on this Commission of eleven members there is only one

Scottish M.A., who is also a professor in Oxford, and one Scottish medical professor, who is also M.B. of the University of London; the others being a peer, a bishop, an eminent English judge, a distinguished statesman, an equally distinguished naturalist, and others quite removed from the least suspicion of any but a dispassionate judgment upon the facts presented to them in evidence, so far as we or you are concerned.

The two addresses which I propose to reprint along with this one will, I trust, convey to you some idea of the direction and scope of these advances in medical education; not perhaps, by any distinct and separate statement of them, but by the glimpses they afford of the aspirations, hopes, and fears on your behalf of one who has been associated with medical students, almost without interruption, since he was a student himself; and this, not in the class-room alone, but in the hospital, and at the bedside of the sick, for nearly thirty years. This double relation to you as your teacher, continued over so long a period, may perhaps be considered to give the weight which comes from experience to suggestions in themselves not otherwise remarkable or profound; at all events you will, I have no doubt, receive them as tending to show how much the mind and heart of a university professor are put into his work, and how much the labour of teaching is for all of us lightened by the secure conviction that we possess your sympathy in all honest efforts to raise the work to a higher level. I am also glad to be able to tell you, and especially the juniors among you, that the testimony of all my colleagues goes to show that an increasingly high standard is being attained, gradually, almost from year to year, and that in particular the studies of the first year in anatomy, biology, and chemistry, show, to a very marked degree, increasing thoroughness. As I attach the greatest possible importance to these studies, not only in respect of their actual details of fact, but still more as a training of the mind into the paths of observation and reasoned experiment, which lie at the very root of all safe and sound medical education, let me press upon you the importance of continuous diligence and zeal at this the very commencement of your studies. Be assured that the labour of acquiring even what is commonly called *practical* information and skill in your profession will be greatly lightened, and your success greatly aided, by application to what is, and must ever be, the only foundation of a medical art that reaches beyond the merest empiricism. And now that all these departments may, according to the arrangements of this, and I believe all the other Scottish Universities, be studied in the laboratory as well as in the class-room, you may be assured that all the benefits which, in the first of these addresses, I ventured to anticipate for the development of practical methods of teaching, will be yours. It is, indeed, the increase of these methods in every department of our work that is mainly characteristic of these latter years of our Scottish University medical education. New buildings, new arrangements, new apparatus, new instruments of research, are everywhere found necessary, not only to convey the old truths, but to interrogate nature directly as to what is and what is not truth. And this *habit of mind*, which is nowadays not less than essential for success in every medical inquiry, can never be so easily and pleasantly acquired as in the first year of your studentship, in the fascinating pursuit of biological research, whether in the animal or the vegetable kingdom. "Don't think, but try," said that mighty man of biological science, John Hunter; not that he meant to discourage thought or intellectual activity, for his own was of the most unresting character; but that in his opinion all intellectual energy should resolve itself into active work, in the way of experiment and observation. This habit, so different from that of the mere literary student, finding his inspiration and materials alike in the knowledge that is got from books, must be acquired as completely as possible before you come to engage in clinical studies, for it is only to a limited extent that we can, in these, afford you the means of acquiring it. How are we to teach you effectually the fleeting phenomena of disease, if you have not for yourselves investigated the corresponding phenomena of health? How instruct you either in the one or the other to any purpose unless you have systematically cultivated your own faculties of observation and experiment by active personal research?

In the second of the introductory addresses to which I have referred I used these words in characterising the existing state of the science and art of medicine:—"The art of medicine is at this moment in a peculiar position. The day of *orthodoxies* is over; the day of *real science* is only just dawning." It is worth while to return to these words for a moment, were it for no other reason than to inquire if the dawn has been at all brightening into day since they were written. The sixteen years since these words were written have been years of immense activity in research, and very much of what has been done in them tends, at least, to fulfil the promise of a medical art of the future founded not on mere hypothesis, still less on dogmatic statements fortified by authority, but on accurate, continuous, and patient demonstrations of fact. In the first place, the art of diagnosis is constantly being improved by the introduction of new methods; and the basis of all these methods consists in this, that diseases hitherto quite obscure, or called only by conventional names corresponding to their most obvious symptoms, are being daily defined and rendered into much more exact conceptions in the light of an improved physiology and pathology, resting upon observation and experiment; so that what were formerly mere ancient names, surrounded by a halo of antiquity and traditional learning and skill, are now recognised symbols guiding the mind to well-understood lesions, as of the brain, spinal cord, heart, arteries, lungs, organs of special sense, and other well-defined points of the living economy, where, in many instances, the presence of the change, or lesion, can be actually demonstrated by such novel instruments as the sphygmograph and cardiograph, laryngoscope, ophthalmoscope, &c. I mention these newer instruments of precision, as they have been justly called, without prejudice to the much older and more established means which are now in the hands of every practitioner—the stethoscope, microscope, thermometer, and simple applications of chemical analysis—all of them employed in accordance with modern pathological investigations of a far more exact kind than any known to those great and wise men, from Hippocrates and Galen downwards to Hoffmann and Boerhave, from whom the art of medicine derives, or derived until the present century, the greater part of its current nomenclature of diseases. This great progress in the direction of realism in diagnosis is apparently quite boundless; for no one can tell, nay, no one can even conceive, how far the progress of a very accurate physiology and pathology, based upon physical and experimental science, may lead us in the years to come; any more than anyone could in these latter years, by mere inspiration or study, have anticipated the splendid researches of Pasteur, the triumphs of antiseptic surgery, or the discovery of Koch's tubercle bacillus.

The mention of these splendid achievements, mainly of the last twenty years, and the last of them only of yesterday (as it were) recalls the fact that it is not only, perhaps not even chiefly, through the perfection of diagnosis, that the medicine of to-day is advancing from dawn into daylight. The enormous labours, the multiplied and varied observations and experiments, that have been bestowed upon these modern researches, in the genuine spirit of exact physical investigation, show that the progress even of diagnosis, and much more of the prevention and treatment of disease, is coming to depend to a greater extent than ever before, upon that discipline of the mind which is to be found only among the consummate masters of physical science. Every day and every year removes us further from the period when it is possible merely to make chance hits in therapeutics, and so, by an individual happy thought, or particular prescription or nostrum, to compete with those who are investigating cautiously and experimentally the results of remedies in disease. The thorough investigation of remedies, in their action both on the healthy and diseased organisation, is proceeding at a rate that seems, I confess, sometimes to be almost too rapid for security, but which has resulted, and no doubt will yet result, in achievements not less remarkable than the advances in diagnosis. And here let me give in my adhesion, in passing, to every word of the admirable address delivered the other day to the students of the Veterinary School by my colleague, Professor Cleland.[3] Like him, I am not personally engaged in experiments on living animals, and have no reason to expect that I shall soon, or perhaps ever, be so engaged. But I hold it to be all the more on this account necessary to protest against a law under which neither the invaluable experiments of Pasteur on the bacillus of anthrax, nor those of Koch on tubercle, could legally have been performed in this country without

[3] Glasgow Medical Journal, November, 1882.

repeated special applications to the Secretary of State, which might with great probability have been refused, or unreasonably delayed. Punish cruelty by all means, and repress it by restrictive enactments, provided you can devise such enactments as will strike impartially at the cruelties of science and of sport; but for a Parliament which tolerates, or even encourages the latter to single out men of science, some of them the most distinguished benefactors both of mankind and of the animal creation, and to place them under ban, forbidding them the freedom of action that is conceded to all other men until they are proved to have done amiss, is to my mind one of the most monstrous and inconsistent, if not hypocritical, positions that any Legislature could assume.

The rapid progress of sanitary and preventive medicine during the last twenty-five years is a subject on which I might well detain you, were it not that I feel that this address has already run to a length sufficient for its purpose. Nor is it necessary, nowadays, to draw special attention to this point. For the progress here has not been from dawn, but from almost absolute darkness into daylight. Every newspaper, every monthly magazine teems with the popularised results of sanitary investigation. He that runs may read. And nowhere less than in Glasgow are we likely to be allowed to forget the importance of this line of investigation, or the many admirable results that have been brought to light by our excellent medical officer, Dr. Russell. The danger rather is, in my opinion, that feeling ourselves so well served, and at the same time so well represented in him, the medical profession at large will cease to interest itself in details which can be so easily handed over to a large and well-organised staff of public officers. This, I think, would be a great evil for us, not less than for the public. For preventive medicine, or the scientific study of the causes of disease with a view to their removal, is an integral part of the art of medicine in general, and cannot be withdrawn from the consideration of its professors without great injury to their function as healers. For these reasons, which I have always insisted upon in detail at every fitting opportunity in my own course of practice of medicine, I should be sorry to see the preventive medical service, or as it is called, the *sanitary* work of the medical profession, too completely specialised, and thus separated altogether from the *rôle* of private practitioner, as has been too much the tendency of late years. To you, as students, I would strongly recommend not to lose sight of either aspect of your future duties. Having acted as a public health officer for nearly ten years previous to 1872, I am able to speak from personal conviction of the valuable effect of such a career in educating the mind towards the recognition of some of the highest duties of the practitioners in the ordinary sense. And this education I shall hope to convey to you, in principle, even if I shall leave to others (as must need be) the development in your instruction of the daily increasing details which form the proper subject of a distinct sanitary course.

Gentlemen, I have done. All that remains for me is to wish you, on behalf of my colleagues and myself, a prosperous, animated, and a successful session. That will not be wanting, if you and we together approach our work in the right spirit. Be in earnest. Be diligent. Be modest and truthful. Help us, as we desire to help you, by mutual sympathy in our joint labours. Finally, *ora et labora*. Look for the blessing from on high. And if modern science seems, at times, to wean your minds away from God, look again, and look further and yet nearer, till in the reign of law you can perceive a truly divine order; in nature a living force behind nature; in the mystery of your own will the faint image of a higher will than your own, neither less nor more mysterious in its essence; in the endless descent of species, whether by evolution or otherwise, the infinitely multiplied reflection of a relationship to Him, who, while He is the Father of our spirits, and the framer of our bodies, is also "nigh to everyone of us," the Father of all the families of the earth, from everlasting to everlasting.

SURGICAL SOCIETY OF IRELAND.—The following office-bearers have been elected:—Council: E. H. Bennett, W. Colles, Anthony Corley, Henry G. Croly, Kendal Franks, E. Hamilton, J. S. Hughes, Archibald Jacob, Rawdon Macnamara, E. Mapother, H. Minchin, E. Stamer O'Grady, G. H. Porter, R. W. Richardson, W. Roe, P. C. Smyly, W. T. Stoker, William Stokes, W. Thomson (Hon. Sec.), R. L. Swan, Jolliffe Tufnell (Hon. Sec.).

THE UNITY OF SURGICAL PRINCIPLES IN WOUND AND FRACTURE TREATMENT.[1]

BY SAMPSON GAMGEE, F.R.S. ED.,
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WOUNDS and fractures are alike interruptions of continuity,—the former of the soft, the latter of the hard parts. They differ in the density of the tissues involved, and proportionately in the time required for reunion; but they are essentially similar in processes of repair and principles of treatment. In wounds and fractures, division of tissue is the essential fact which gives rise to a common chain of events—mobility, disordered innervation, and effusion,—which become causes of ulterior pathological results, if their development be not checked by proper treatment. The indication, common to the vast majority of wounds and fractures, is to bring the severed parts together and keep them so during the process of repair. How that indication shall be fulfilled—what peculiar appliances are demanded by injuries in particular situations, and by such complications as contusion, hæmorrhage, and inflammation,—are questions traversing the whole domain of surgery: fit themes for a treatise, only admitting of cursory treatment in a paper for an evening's discussion. It will be my endeavour only to select for comment those salient principles and points of practice on which agreement is most to be desired and nearest of attainment.

Firstly, as to the reduction of fractures of the limbs; that should be immediate, and maintained with the nearest practicable approach to immobility, a rule of practice of which no other in surgery admits of fewer exceptions. In selecting from amongst the numberless contrivances for maintaining immobility, preference should be given to those which admit of accurate moulding to the limb, including the joint above and below the seat of injury. It is beyond question that, with wood and iron splints, many surgeons have for generations achieved excellent results in fracture treatment; but, for comfort to the patient and freedom from complications, moulds are best; they can be constructed with a great variety of materials — plaster, gum and paraffin, millboard (plain or soaked with dextrine), gutta-percha or paro-plastic felt. The last-named and dextrined millboard are, I think, the most handy and efficient; but, where all are good in principle, choice may well be left to the predilection which grows out of individual experience. Whatever splint or mould be used, let it be well padded, and I know no pads equal to those made with absorbent gauze and cotton, which possess practically indestructible elasticity. The materials of which bandages are made, still more the method of bandaging, are of the first importance. Uniform elastic compression powerfully contributes to preventing muscular contraction, and *pro tanto* securing immobility. It prevents extravasations, and, when they do occur, promotes their absorption. I employ pressure in the treatment of all fractures, with perfect elastic padding, light, yet decidedly compressive, smooth bandaging, without ruck or reverse. It is many years since I used one of the unbleached calico bandages common in most hospitals. Preference should be given to these soft, bleached, absorbent bandages. A depth of two inches is the handiest, the rapid spiral the most convenient, comfortable, and efficient, mode of application. In bandaging a leg, for instance, having previously padded it, a couple of circular turns are made just above the ankle. The roller is then carried along the dorsum of the foot, and a circular turn made around the roots of the toes. With a few figures-of-8 the foot, including the heel, is covered; the roller then carried spirally along the front of the leg to the knee, here made fast with a circular turn. Alternately ascending and descending figures-of-8 complete the elastic investment. The method is applicable, with trifling variations of detail, to all parts of the body. Whenever practicable, suspension will be found of the utmost service as an addition to the means of maintaining immobility. The suspension of a limb in two or more loops of bandage or leather is not what is here meant; that is comparatively fixed elevation, of unquestionable advantage for position, but not a perfect swing; for this a fine cord is even better than a chain. The greater the motility of the suspending medium,

[1] Read before the Medical Society of London, Nov. 6th, 1882.

the more completely does it oscillate and exhaust any motor power communicated to the limb; in other words, the fragments of a suspended broken limb, once perfectly adjusted, can be kept at rest in direct proportion to the perfection of the swing.

Another form of suspension, different in principle and mode of application, but still very useful, is that of suspending a weight to a limb. It overcomes muscular contraction by steadily exhausting it, and alone, or in combination with moulds and pressure to an injured part, is of great service in maintaining immobility. Assuming so much conceded for the treatment of a simple fracture, agreement would probably be less complete, if a fracture complicated with swelling, sanguineous or inflammatory, were in question. But in such a case, no less than in the simple one, should reduction be immediate, with elastic compression, absolute immobility, and oscillatory suspension. Digital compression of the main artery will assist in promoting absorption. In a very few hours the outside of the apparatus becomes loose, and its elastic construction admits of fresh padding and compressive bandage, without disturbance of parts, and with unfailing benefit in promoting absorption, checking inflammation, and consolidating repair. The additional complication of a wound or a bleb makes no substantial difference; given a compound fracture, only let the fragments be immediately and accurately adjusted, the wound closed with all necessary provision for perfect drainage, the limb immobilised compressed and swung, and, in the vast majority of cases, the fundamental indication will have been carried out, reducing the compound to a simple fracture, and treating both on identical principles.

If a simple fracture, say of the clavicle because it admits of easy observation, be not at once immobilised, material is thrown out between and around the broken ends of the bone the deposit thickens, the part becomes hot and painful. Such a condition is best seen in those, happily, rare cases in which a fracture of the clavicle goes for some days undiagnosed. Immobilise the limb and the callus vanishes, all the more rapidly if compressed under an elastic pad. Given a flesh wound in most parts of the body; if the edges be at once accurately brought together, and kept so, provision made for deep and surface drainage, and immobility maintained, direct union takes place, all the more surely if the part be kept in a position to favour venous return and prevent arterial afflux. Here, again, perfectly smooth elastic compression is of the greatest service, not merely in maintaining contact of the deeper, as well as of the superficial, lesion, but in restoring the balance between elastic resistance and blood pressure, which is the normal condition of living parts. Let a flesh wound, like the one we have just been considering, not be accurately adjusted; let it be treated with water dressing or a poultice, with the limb dependent and not immobilised. The edges become tumid, the wounded surface discharges and stinks, the surrounding skin is red, tumid, and painful. In this state, raise the limb to empty it of its blood, approximate the edges, resort to elastic compression and immobilisation, swelling and pain vanish as if by magic, and healing proceeds, just as in the case of the fracture with swelling which we were considering a few minutes ago. A fracture with a wound complicating it, the condition generally known as compound fracture, will be found amenable to treatment on the principles enunicated with the happiest results.

My remarks have hitherto been directed to injuries of the limbs. Their truth and practical value are equally well, if not better, illustrated in injuries of the head, with some modifications rendered necessary by the condition of parts. In a fracture of the vault of the cranium without wound, the great indications of rest and prevention of extravasation are fulfilled by keeping the patient in comparative darkness, in the horizontal position, with an ice-cap. No wounds do better than scalp wounds under dry dressings, elastic compression, and a minimum of subsequent interference. An adaptation of the same principles, according to the exigencies of particular cases, will ensure success in the treatment of a large proportion of compound fractures of the skull. The question of trephining is one of special and exceptional interest, to which it would be here impossible to do justice. But as I have no wish to shun difficulties, and to restrict the scope of discussion, I may briefly state that there are very few cases in which I consider trephining justifiable in fractures of the skull. I have practised it, and seen others do it, with happy result; and I can conceive of cases in which I should not only trephine, but be prepared to incise the membranes and the substance of the brain, to fulfil local indications of effusion and compression. But if we go back to the early days of this controversy, and trace it down to our own time, I am clearly of opinion that more people have owed their death, than their life, to the trephine.

To ensure absolute rest in wounds and fractures, immobility should be secured to the utmost practicable extent, while the reparative process is going on; but no longer. Every surgeon knows how much mischief results from rest too long persisted in. The experience only affords another illustration of almost every truth, psychical and physical; carried to extremes it becomes a vice. With this reservation, the practical application of which must depend upon the exigencies of particular cases, immobility is one of the most powerful factors in surgical therapeutics. A corollary of that proposition is infrequent dressing. On this point the agreement of surgeons at home and abroad has grown very manifestly during the last few years. Whatever the nature of the injury, it is scarcely possible to be too accurate and complete in first dressings. Then watch the thermometer and the pulse, the patient's expression and the state of the skin; and so long as those cardinal indications point to safety, dress as infrequently as possible. To this end absorbent dressings contribute materially, and if they be not sufficient to ensure perfect drainage, one or more tubes may be employed for the purpose. By keeping them long, and carrying them out through the pads, it is easy to collect the discharge in a pad lightly placed over the end of the tube, so as to combine frequent removal of discharges with immobility of the apparatus.

Experience proves that the more absolute the immobility, the more evenly the limb is compressed, the closer attention is paid to position, proportionately less are irritation, vascular turgescence, and consequent effusion. The healing part shrinks as it consolidates, and dries in direct proportion as its nervous and vascular life is controlled. "That under dry and infrequent dressings, absolute rest, physiological position, and elastic pressure, most wounds and fractures heal," is a proposition which I have striven to defend since I formulated it years ago. The argument so far has been in the same direction, and that because experience only confirms its soundness.

(To be concluded.)

NOTE ON THE USE OF

BOROGLYCERIDE IN THE TREATMENT OF WOUNDS.

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ON March 19th of this year I was some distance from home, consulting with Dr. Walker, of Stapleton, in this county, and he mentioned to me that a new antiseptic (boroglyceride) was creating some stir in Germany, and offered to provide me with some if I would use it and record my experience. Accordingly a few weeks later I received four ounces, which were dissolved in water and used in the strength of 1 to 20 and 1 to 40. In appearance boroglyceride is like large cakes of isinglass, of the colour of gum acacia, sticky as toffy, and has a slightly warm taste of indefinite and transient character. In solution it is colourless and almost tasteless.

We are now in possession of a few facts in reference to the use of this new antiseptic as applied to wounds, many of which have been treated with it, but owing to the supply from Dr. Walker having scarcely kept pace with the demand, the trial has not been as complete as could have been desired. A case of Syme's amputation for ankle-joint disease was treated with boroglyceride from the first — i. e., the flaps were washed with the solution, and the stump wrapped in lint steeped in 1 to 40 solution; the subsequent dressing consisted in washing out the cavity and using lint as before, the result being as excellent as, but not more excellent than, I have seen in similar cases treated with dry lint. The stump kept sweet to the nose, but the drainage-tube and pus squeezed from the stump were not so. It is probable that we used the solution

too paringly; and allowance must be made for this, for occasionally we had to wait for the arrival of a fresh supply. Another case of railway smash of the foot (Syme's amputation also) which was not healing kindly (Listerism having been relinquished on account of putrefaction), was treated with boroglyceride, and although healing was neither interfered with nor accelerated, yet smell was unquestionably kept down. Several wounds, the result of either accident or surgical operation, have also been treated with boroglyceride with satisfactory results, and the conclusions I have arrived at so far are as follows: For open wounds or wounds with open cavities boroglyceride in solution will be found to be a non-irritating and powerful antiseptic, in no way interfering with natural healing processes, and in no degree troubling the skin around a wound; but where shut cavities exist, as in stumps after amputation, although syringing with the solution be adopted, yet the discharge collecting within is not kept sweet. I feel sure that much remains to be done to develop the use of this new antiseptic, which, on account of its non-irritating properties, will prove of much value in the treatment of wounds. To claim for any antiseptic a value beyond one's experience would be to court distrust, and I prefer to speak hopefully rather than positively.

Mr. Barwell's paper in THE LANCET of May 13th certainly supports our experience of the value of boroglyceride, but we have not succeeded in preventing rises of temperature, any more than we have succeeded in obtaining union without one drop of pus, neither have we seen remarkable results as to healing by first intention; in fact, the results may seem to be *nil*. I think the use of stronger solution than 1 to 40 or 1 to 20 may be tried, and the lint around the wound should be kept constantly moistened with the solution. As far as I am aware boroglyceride is innocuous, a matter of great moment, when one recollects how many patients have been poisoned by doses of carbolic acid by inadvertence, how many untoward symptoms have been put down to the use of the carbolic spray and absorption of carbolic acid.

I hope on a future occasion to add more to this brief note, which must conclude with an acknowledgment of thanks to Dr. Walker, who manufactured the boroglyceride himself.

Carlisle.

THE DIFFERENTIAL DIAGNOSIS BETWEEN HYSTERICAL PARALYSIS AND POLIO-MYELITIS ANTERIOR.

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IN the experience of every practitioner there must have occurred cases of paralysis in women upon which he has been called upon to decide whether the affection was due to serious organic disease of the nervous system, or to that more protean disorder to which we give the name of hysteria. In many such instances there is often the greatest possible difficulty in arriving at a satisfactory conclusion, and the perplexity of the medical attendant is proportionate to the responsibility he assumes in expressing an opinion, and the important issues upon which his verdict depends. That grave errors in judgment on this complicated problem have frequently been made, must be within the knowledge of all, resulting in misfortune to the patient, discredit to the profession, and a triumphant harvest to the charlatan.

Polio-myelitis anterior, or, as it is more commonly called, "infantile paralysis," is more especially liable to be confounded with hysteria, as the symptoms and progress of the case are very similar in both. The paralysis resulting from this serious organic disease of the cord attacks the adult, both in its acute and chronic forms, much more frequently than is generally believed. It is obvious that to make a clear distinction between these two disorders is of the highest importance, as the treatment suitable for the benefit of the one would be useless, or even injurious, if applied to the other. A consideration of this question appears at the present time to be worthy of discussion, as recently there has been a revival of certain energetic measures in the treatment of paralysis of a supposed functional and emotional origin; and Drs. Weir Mitchell, Playfair, and others have recorded successful cases of great interest and importance. Although it is admitted that certain procedures were followed by the most satisfactory results when employed by competent physicians, in properly selected cases, it must equally be granted that the same treatment would in different instances be followed by the most disastrous effects. The writer has not infrequently seen young women condemned to a couch for years, supposed to be suffering from spinal or uterine affection, which a little energy and determination on the part of the physician would have cured in a few weeks. On the other hand, not less often has he met with unfortunates who were scoffed at and otherwise ill-treated as being nervous and hysterical, or imagined to be exaggerating or feigning disease, when in reality they were suffering from an organic lesion of the nervous system. This confusion has arisen from the extreme difficulty in many cases of accurately diagnosing between paralysis, arising on the one hand from organic degeneration of nervous structure, and on the other as a result of emotional or so-called hysterical causes. It is assumed in text-books and by the profession generally that the differentiation between these is easily defined, but as a matter of fact even when the greatest care is taken this is not always the case, and after the fullest investigation much doubt remains.

With the view of illustrating this position let us take a case which not infrequently occurs in practice. A young woman suddenly or gradually becomes paralysed in the lower extremities. This may, in a few days, weeks, or months, in different cases, become complete or may remain partial. There is no loss of sensation, no muscular rigidity, no cerebral disturbances, or any affection of the bladder or rectum. The patient's general health may be robust, or it may be delicate. She may be of emotional and hysterical temperament, or, on the contrary, of a calm and well-balanced disposition. At first there is no muscular wasting, but as the disease becomes chronic the limbs may, or may not, diminish in size. The entire extremity may be affected, or only certain groups of muscles. Finally, the disease may partially or entirely recover, or may remain almost unchanged for years.

With such a clinical picture before us we have to ask, What is the diagnosis of such a paralysis? The description applies with equal fidelity to either hysteria or polio-myelitis, and by depending on symptoms alone it is in such doubtful cases that the decision of the question seems to depend on the accidental fancy of the medical attendant, and which so frequently results in an erroneous view being taken of the case. It is granted that the problem is a difficult one, and even a careful analysis of the symptoms does not appear greatly to assist its solution. The patient when attacked with the paralysis may be in perfect health, or the reverse; she may, or may not, be hysterical; there may be some assignable cause, or not. In all these circumstances the loss of motion may be either due to polio-myelitis or hysteria, as the former occurs with equal frequency in the robust and in the delicate, and the latter as often appears in apparently the most healthy persons as in the most nervous; the first is as likely to be present in hysterical subjects as in the reverse, and the second may follow a cold, injury, or other supposed origin of organic disease. In short, although it is true that hysterical paralysis frequently occurs in persons evidencing other nervous or emotional symptoms, these are by no means necessary to establish the diagnosis, as some of the most intractable forms of this affection have occurred in women of apparently phlegmatic temperament and well-balanced minds. Again, polio-myelitis is as likely to attack the hysterical subject as any other, and thus further complicate the inquiry. The paralysis appearing suddenly, or very gradually, applies equally to polio-myelitis or hysteria. As in the acute form of the first, the loss of motion may ensue in a few hours, and in its chronic form it may proceed very slowly and insidiously. In both the process may be partial or complete. It may attack one or more limbs, or only part of an extremity; indeed, special muscles, or irregular groups of these alone, may be affected. All these particulars equally apply to both forms of paralysis under consideration. In each the sensibility may be intact, the intelligence and special senses unimpaired, and the functions of the rectum, bladder, and other organs of the body healthy. If muscular atrophy existed to a marked extent at an early period of the disease we might exclude hysteria, but in many instances in this respect there is

nothing definite to be observed. The limbs in both forms of paralysis may for a long time appear of natural size. Muscular wasting, if it exists, may be obscured by an increased deposit of fat, and the hypertrophy of other structures. Again, if paralysis has existed for any length of time, the limbs may become smaller, not necessarily due to degenerative atrophy, but to simple emaciation from functional disuse. Thus, as in paralysis resulting from both hysteria and polio-myelitis, the symptoms and general progress of the disease are in many cases identical, it becomes a serious practical difficulty to definitely determine whether in a given case answering to the description already detailed, it is due to degeneration of the anterior cornua of the cord, or to that less formidable affection, hysteria.

To solve the problem, as in other branches of medicine, we must not depend on symptoms alone, but, as far as possible, should bring physical phenomena to our aid for the accurate determination, demonstration, and measurement of facts. Exactly in proportion as we thus supplement our senses, so do our powers of precise research and investigation succeed. Although important advances have been made in other fields of medicine by the utilisation of optics, acoustics, and other practical sciences, as evidenced by the employment of the ophthalmoscope, speculum, stethoscope, thermometer, &c., in diseases of the nervous system such methods of exact inquiry have hitherto been conspicuous by their absence. In recent times, as this want has been appreciated, endeavours have been made to supply the demand. The most successful of these is the employment of electricity as a diagnostic agent; and although our knowledge of its properties is not as yet fully developed, we have even now at our disposal such information on the subject as proves of invaluable service in the differentiation of many nervous disorders. It has already been pointed out that by symptoms alone we are not able, in many cases, to distinguish between paralysis resulting from organic disease of the anterior cornua of the cord and that due to hysteria. When we turn to physical signs, we find that there are at least two which give us definite information on the subject. These are—(1) the reflex actions following cutaneous irritation or percussion of tendons, and (2) the effects of electrical stimulation.

1. *The Reflex Actions.*—When polio-myelitis involves any reflex arc, the reflex motions associated with the track interfered with are destroyed. In the case, therefore, of paralysis of the lower limbs, resulting from this disease, all the cutaneous and tendon reflexes are absent. In hysterical paralysis, on the other hand, these phenomena are not abolished. They are usually normal, and not seldom are actually exaggerated in degree, so that not only are those which naturally exist much increased in intensity, but new reflexes not found in health are developed. Here, then, is a marked distinction between hysteria and polio-myelitis. Although this rule applies generally, it must be admitted that it is not without exception. Reflex acts vary somewhat even in healthy persons, and in rare instances have not been obtainable. Again, it is just possible that in degeneration of the anterior cornua certain parts of their substance might be preserved, and although paralysis existed, certain reflexes might be elicited. In hysteria also the reflexes are sometimes absent for reasons not easily explained. Such cases, however, are extremely rare, and the general law holds good that in paralysis from polio-myelitis the reflexes are impaired or abolished, while in that from hysteria they are normal or increased.

2. *The Electrical Reactions.*—These are for the most part definite and conclusive. In acute polio-myelitis the excitability of the affected nerves is very rapidly lost, so that in from a week to ten days after the onset of the paralysis the response is altogether abolished to the electric stimulus. Very soon afterwards the muscles are affected, and then ensues all the characteristic quantitative and qualitative changes met with in neuro-muscular affections. In the chronic forms of the disease the same takes place, but in a more gradual and progressive manner. In hysterical paralysis, on the other hand, the electrical reactions remain practically normal. In some cases there may be quantitative *increase* of response, indicating hyper-excitability of the nervous system, but these changes are slight in degree, and there are never qualitative alterations. In very chronic cases also, in which the patient has been bedridden for years, there may be quantitative *diminution* of response due to prolonged disuse of the muscles, or to increased resistance to the current from an augmented deposition of subcutaneous fat as the result of want of exercise. In such cases the loss is never complete, and the change is one of degree only, and not of character.

Thus in electricity we have an agent which enables us in the large majority of cases to detect with accuracy and certainty between polio-myelitis and hysteria, and, so far as my own experience has gone, I have never met with a case of the former which did not present some characteristic abnormal reactions, nor an instance of the latter in which these were developed.

It is to be observed that great care and much dexterity and experience are necessary for profitable electrical investigation. It cannot be exactly asserted that an expert alone is necessary for this purpose, but certainly it cannot be satisfactorily conducted except by those who, through knowledge and practice, have overcome the technical and manipulative details necessary for its successful performance. The system of wildly dabbing sponge electrodes on the skin without a definite method, is absolutely useless as a means of deducing trustworthy diagnostic data, and it is the popular use in this way which has hitherto been so fruitless and brought a valuable physical agent into discredit. A novice, ignorant of the use of the stethoscope, would hear little or nothing on applying it to the chest, and still less would he deduce those important conclusions which the experienced physician would recognise. Precisely in the same way is electricity a means towards an end, which can only be put in successful operation by a practical knowledge of the agent employed, with dexterity and experience in its administration.

It would be out of place here to describe either the method of procedure or the particulars of the reactions found in the two forms of paralysis under discussion. These have elsewhere been considered in full detail.

The general conclusions to be drawn from the foregoing remarks are:—(1) That, judging from the history, symptoms, and progress of the case, in a large number of instances it is difficult or impossible to diagnose between paralysis from hysteria or from polio-myelitis; (2) that a correct differentiation between them is of the highest importance, as the treatment successful in the one is useless or may be injurious in the other; (3) that in order to arrive at a true diagnosis, we must as far as possible apply physical agents in their investigation; (4) that in the diseases under consideration the conditions of the reflexes, resulting from physical manipulations, afford us valuable information, although open to certain exceptions; and (5) that electricity supplies us with an agent which, in the large majority of cases, will definitely enable us to correctly decide whether a given paralysis is due to organic disease of the anterior cornua of the cord, or to that affection to which we apply the term hysteria.

ON BONE-SETTING (SO-CALLED).[1]

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THIS is the first time in the history of the British Medical Association that so-called bone-setting has been seriously discussed, and I think it is matter for congratulation that we have at last set ourselves impartially to examine the practice, notwithstanding that it is almost exclusively employed by a class of persons who are without our pale. The literature of bone-setting is scanty. Dr. Wharton Hood's handbook, giving an account of the late Mr. Hutton's method of setting free stiff limbs, is, so far as I know, the only attempt at a systematic exposition. There are, in addition, some papers scattered through the various journals, by Mr. Adams, Mr. Howard Marsh, and others, stating their opinion as to what cases are most likely to be benefited by the forcible bending of joints, and giving instances of ill results that have followed such treatment in unsuitable cases. For nearly three years I was assistant to the late Mr. James Taylor, M.R.C.S., of Whitworth in Lancashire, the last direct descendant of a family that had practised

[1] Abridged from a paper read at a discussion before the Surgical Section of the annual meeting of the British Medical Association at Worcester, 1882.

bone-setting in that village for more than two hundred years, and I think I may perhaps be able to throw some light on the subject of this discussion.

Much misconception exists as to the practice of bone-setters; many of the methods of treatment popularly attributed to them have no other existence than in the imagination of ignorant patients, whose stories we as a profession are perhaps rather too ready to believe. It is certain that some families — notably the Taylors, Huttons, and Masons—have by their manipulative and mechanical skill justly acquired a great reputation. In what has their practice consisted? First, in the treatment of fractures, recent dislocations and sprains; secondly, in the cure of stiff joints, resetting of fractures, and correction of deformities. The general impression in the profession appears to be that the bone-setter's art consists of nothing more nor less than the forcible and reckless "cracking up" of stiff joints so as to make the lame man walk as if by a miracle. The practice at Whitworth was a large one, furnishing constant employment for at least two active men, and consisting chiefly of the cases I have mentioned. Speaking from memory I do not believe that fifty joints of all sorts were "cracked up" during the time I was there; but it was not an uncommon event to have to put up half a dozen fresh fractures and twice as many recent sprains in a single morning. In the North of England the origin of nearly all the men who are fairly good at bone-setting can be traced to the Whitworth surgery, and while, so far as I know, the Taylors in their various settlements at Whitworth, Todmorden, Lockwood, and Oldfield Lane were the only qualified surgeons who practised bone-setting; amongst the hills and dales of Lancashire, Yorkshire, and the Lake district, there were many who did so without being qualified, some of whom, I must in all fairness say, put up fractures uncommonly well. But apart from the legitimate credit they have won by the skill displayed in their handicraft, they owe some of their success to the carelessness or indifference of the general body of practitioners, who are apt to overlook little injuries which often become very painful and troublesome. It sometimes seems to me that it is beneath the dignity of the ordinary practitioner to employ any active treatment whatever for a sprain. It is hardly fair then to gauge the work of bone-setters solely by their method of treating diseased joints (probably the most unsatisfactory class of cases in the whole realm of surgery), but we ought also to take into account the patience and skill they display in the treatment of injuries for which they are not unfrequently consulted by the patients of qualified practitioners. I have no desire to hold a brief for every idle fellow who calls himself a bone-setter, but I am anxious to give credit where credit is due, and to explain that the *art* of bone-setting is not what it is often thought to be, a mere mixture of charlatanism and good luck.

I purpose chiefly to consider that class of cases to which Mr. Adams and Mr. Marsh have more particularly referred. Dr. Hood (*loc. cit.*) has made out a somewhat extensive list of causes for stiff or weak joints, but I think he had in his mind rather what was *likely* to come to the bone-setter than what actually did come. From my own experience I should classify weak joints as follows:—

1. Those that have become stiff from enforced rest.
2. Those that have become stiff from chronic disease.
3. Joints stiff from injury to the bones entering into their formation.
4. Joints stiff and weak from sprains, including displacement of tendons and partial luxation.

Apart from the previous history of the case, and the evident existence of constitutional disease, there are some external appearances which help to distinguish cases and to afford indications for treatment, and of these the bone-setters have learned by experience to avail themselves.

1. In the first class I have mentioned, the stiffness of the structures about the joint impeding its movements is the result of purely mechanical causes, is in fact simply due to prolonged disuse. No cause for functional activity exists, and consequently the elasticity, the flexibility, and power of adaptation to movement in the parts about the joints not being required, they become stiff and rigid. No degenerative changes, however, take place, and they are capable of being recalled into activity unimpaired. In such a joint the bony points and the outlines of the tendons and ligaments about it, seem unnaturally prominent, probably from absorption of the adipose and connective tissue; the rigid ligaments impart a sense of hardness, and if the limb be flexed to its utmost it shows considerable resiliency. Such joints may, I believe, be "cracked up" without fear of consequences, and this constitutes one of the successful operations of bone-setters. My own recollection carries me back to some apparently almost miraculous results. I am convinced that *suddenness* ought to be insisted upon in doing this; the advantages derived from it being, I believe, mainly due to the fact that it is less likely to set up any irritation in the joint than the "dragging" of gradual extension.

2. In the next class of cases, in which stiffness is due to degenerative changes, the external appearances are exactly reversed, the outlines of the joint are more or less gone. In these cases, no matter the character of the disease, manipulative interference is positively vicious; and while it is in them that ignorant bone-setters do so much mischief, the better informed, by the use of splints and well-applied pressure, are highly successful in their treatment.[1] I am sorry to say very many cases of this kind come to bone-setters which have not been properly treated before, owing to their not having been recognised, especially hip-joint disease.

3. In the third class of cases, in which a fracture has taken place into the joint, causing stiffness, the condition is due to disturbed relationship of the bones from faulty setting, and is recognised by comparison with the bony landmarks of the sound limb. In these cases forcible treatment does good, though of course the result is in proportion to the amount of bone-displacement, but it should be supplemented by passive movements for some time. In joints stiff after diagonal fracture through the condyles of the humerus, so common in children, I have seen many most gratifying results; one in a boy about twelve years old, whose elbow had been stiff three years, is especially impressed upon my mind.

4. In the fourth class of cases, and those to which I would draw particular attention, I include lameness and weakness, the result of the various forms of injury, which we group together under the general term "a sprain." I affirm most unhesitatingly, from an experience of some hundreds of cases, that nothing has done more to lower the prestige of regular practitioners, and to play into the hands of unqualified bone-setters, than the way in which so many practitioners tamper with a sprained joint. Sprains, of course, vary greatly in severity; they may be broadly divided into two kinds, of which one consists merely of a temporary over-distension of the parts around a joint, which rest and anodyne applications soon cure, while the other involves pathological results of a much more serious nature. A *severe* sprain is the sum of the injuries that the parts in and about a joint sustain, when, by their passive efforts, they exercise their maximum power of restraint to prevent luxation. Under such conditions I conceive the following changes to take place in the integrity of a joint. In the case of the synovial membrane, temporary hyperæmia accompanied by pain, and some slight effusion into the cavity of the joint. In the case of the tendons, overstretching and loosening of the lining membrane of their sheaths, more or less disturbance to the adjacent cellular tissue forming the bed of the tendon groove, and hyperæmia with exudation of plastic fluid, subsequently forming adventitious products. In the case of the non-elastic fibrous ligaments—firmly attached at either end to the adjacent periosteum—over-stretching, mostly involving partial rupture, with swelling, softening, and disintegration of their structure. It is beyond the purpose of this communication to draw attention to the plan of treatment adopted by bone-setters under these circumstances; it is, however, described in a paper of mine, of which an abstract is given in the *British Medical Journal* of Sept. 25th, 1880. The stiffness of a sprained joint is *partial*. The surface is generally cold, and more or less œdematous, and each joint has one particular spot in which pressure causes acute pain; the bone-setters have learned by experience the situation of these spots, and this fact has done more than anything to strengthen the popular faith in their intuitive skill; they certainly form an important guide to treatment, since they indicate the seat of greatest injury to the ligaments and point out where their power of passive resistance has been most severely tested, and where adhesions are most likely to have formed. Dr. Hood, in his record of Mr. Hutton's practice, has enumerated some of these painful spots; the chief of them are as follows:—

1. Over the head of the femur in the centre of the groin,

[1] Rheumatic cases sometimes do well for a time, but invariably relapse.

corresponding to the ilio-femoral band of the capsular ligament (which is most severely stretched when the thigh is over-extended, as when the trunk is flung violently backwards, the commonest cause of a sprained hip).

2. For the knee-joint, at the back of the lower edge of the internal condyle—in other words, at the posterior border of the internal lateral ligament, where it blends with Winslow's ligament, and where the semi-membranosus tendon is in intimate relation with it. These parts suffer most because, as Mr. Morris says, "During extension they resist rotation outwards of the tibia upon a vertical axis," and a sprained knee is almost always caused by a twist outwards of the foot.

3. For the shoulder at the point corresponding to the bicipital groove, because in nine cases out of ten a man sprains his shoulder to prevent himself from falling, his hand grasps the nearest support, the body is violently abducted from the arm, the long head of the biceps is called upon to exert its utmost restraining power, the bicipital fascia is overstretched, and the tendon very often displaced.

Again, for the elbow the painful place is at the front of the tip of the internal condyle; the fan-shaped internal lateral ligament has its apex at that point, and it is most stretched in over-supination, with extreme extension of the forearm. On the front of the external malleolus, at the apex of the plantar arch, the tip of the fifth metatarsal bone, the styloid process of the ulna, the inside of the thumb, and the annular ligament in the front of the wrist, are respectively the most painful spots when those joints are severally sprained.

The manipulative part of the treatment of joints stiff from being sprained may be briefly said to consist in pressure over the part most injured, and momentary extension of the limb, followed by sudden forcible flexion. The method of doing it varies with each joint, and I can with confidence refer you to the descriptions given by Dr. Wharton Hood, as being faithful word-pictures, supplemented, too, by very accurate drawings.

The following are some of the lesser injuries the non-recognition of which has frequently come under my notice at Whitworth. In the upper limb: Fracture of the tip of the acromion; partial luxation of the acromio-clavicular and sterno-clavicular joints (often happening to men who carry weights on their shoulders); partial dislocation of the long head of the biceps, with over-extension of the bicipital fascia (common in men who throw weights or use a shovel, as malsters or navvies). Dislocation of the head of the radius forward on the condyle, which is very common in children, and has a marked tendency to cause stiff elbows; fracture of the tip of the internal condyle; overlooked Colles' fracture; partial luxation of the head of the ulna (impeding supination of the hand, and having a tendency to gradually grow worse); severe sprain at the carpo-metacarpal joint of the thumb (very common in stonemasons, and caused by the "jar" of heavy chisels).

In the lower limb: Fracture of the fibula just above the malleolus and at its tip (these are fruitful sources of lameness, often overlooked, and, if of old standing, very troublesome to treat); partial rupture of the ligamentum patellæ at its insertion into the tubercle of the tibia, which is much more common than is ordinarily supposed;[3] neglected over-stretching of the ligaments of the plantar arch, and tearing of the plantar ligament at its insertion into the os calcis; rupture of the penniform muscular attachments of the tendo Achillis, and muscular hernia in the calf.

I trust I shall be forgiven if I have dwelt too much on the *étourderie* of some of us, but I am sure so-called *trifling* injuries deserve more attention at our hands, since living at the high pressure men do nowadays, with every part of their bodies tested to its utmost capacity, the slightest impairment of the mechanism of a limb must be an incalculable source of personal annoyance, discomfort, or disability.

[3] I have seen almost complete rupture unrecognised; while tearing of the ligament from its extensive insertion into the surface of the tibia is very frequent.

THE MUSICAL SOCIETY OF UNIVERSITY COLLEGE, LONDON.—This Society, having secured the co-operation of Mr. Alberto Randegger, will hold its first practice meeting in the Mathematical Theatre on Friday, November 24th, at 4.30 P.M.

CONGENITAL CYSTIC HYGROMA.[1]

By EDMUND OWEN, F.R.C.S.,
SURGEON TO ST. MARY'S HOSPITAL.

IN the volume of the Transactions of the Medical and Chirurgical Society for the year 1839 is a paper by Mr. Cæsar Hawkins upon the subject of the present communication. It is, so far as I know, the first treatise that we have upon these cystic growths, and I very much doubt if any matter of importance, either as regards their pathology, diagnosis, or treatment, was left by Mr. Hawkins for future writers to fill in.

Congenital cystic hygroma is by no means of unfrequent occurrence, and it is strange that so little notice is taken of it in our works on general surgery.

The first case to which I will direct attention is that of the little girl that has just been examined by the meeting. She is now between three and four years old. A few days after birth her mother noticed a swelling under the right side of the tongue, which, on being shown to the doctor who attended her, was called a "ranula." He refused, however, to interfere with it. The supposed ranula grew, extending across the floor of the mouth and amongst the muscles behind the symphysis of the maxilla, until a definite tumour appeared against the angle of the jaw. The little patient was then brought to me, when I told the mother that nothing was to be done to the tumour, which, as it was growing rapidly, might entail serious consequences. My impression is that this enormous mass has now ceased to grow. It is certainly harder than it was, though its cystic nature is still quite evident. It is not tender, nor does it apparently interfere with the child's health or with the nutrition of the skin. I am still content to watch and wait.

The second case is that of a boy of five months who was under my care at the Children's Hospital. He had a cystic hygroma of the size of a walnut in each subclavian region and in each axilla; it was doubtful whether the upper and lower tumours were in communication. Mr. Thomas Smith saw the child with me, and we agreed that no active treatment should be undertaken. When I next saw the little patient, after an interval of three weeks (the mother lived at a distance, and was not led to expect much from treatment), the upper pairs of tumours had almost met across the episternal region; there was difficulty on swallowing, and commencing œdema of the eyelids and of each upper extremity. Translucency showed the cystic nature of the superficial part of the subclavian masses. A week afterwards the mother came to tell me that the child had died on the previous day, and that the tumours had gone on growing so that at last the child could hardly breathe. She said also that the œdema of the hands and arms had gone on increasing until the day before the death, and that the legs and thighs had towards the last days also begun to swell. Her opinion was that death was caused by suffocation. No post-mortem examination was made.

Here, then, are reports of two cases of, so far as one can tell, a similar pathological nature, in one of which fatal complications brought on a sudden termination, whilst in the other a quiescence which one hopes is genuine seems to point to the fact that activity of growth has given place to spontaneous degeneration or atrophy. It is impossible to say what course a cystic hygroma may take; whether it is about to undergo immediate or future growth, or whether it is about to undergo interstitial changes which shall reduce it to a "loose pendulous bag of fat." Inflammation of the tissues, either spontaneous or induced, will at times determine their atrophy, and from the increasing hardness in the case of the little girl, I suspect that such a change is at hand. As Mr. Hawkins remarked, some of these tumours look as if they could be easily dissected out, but to remove one from the neck the operator may have to work around the carotid vessels and possibly behind the pharynx. I once dissected such a tumour from the side of the chest, and even then I had to root it out from beneath the border of the latissimus dorsi. Mr. Hawkins suggested that their treatment should consist in puncture of the larger cysts, and in the application of pressure and counter-irritants. To which

[1] Read before the Medical Society of London, Nov. 6th, 1882.

one might perhaps add that in certain cases atrophy may follow the inflammation caused by the presence of one or more setons through the mass. Probably spontaneous inflammation is their most desirable complication.

In conclusion, I would remark that, as in the first case, a congenital cystic hygroma in the sublingual region may be mistaken for a ranula, an error in diagnosis which is more likely to lead to disappointment than to damage. That in whatever situation it may occur it is apt to be mistaken for a subcutaneous nævus, or for one beneath the mucous membrane; and, lastly, that at times the resemblance to a fatty tumour is extremely close.

A second child exhibited possesses the remains of a hygroma on the arm. The patient has been three years under observation, but the mass, which now resembles a diffuse fatty tumour, was, when first under observation, of evident cystic formation. This is the only instance which I have seen of a congenital cystic hygroma situated upon an extremity; their favourite seat is the armpit and the floor of the mouth.

Seymour-street, W.

PENETRATING WOUND OF THE ORBIT, INVOLVING THE BRAIN;

NO MARKED SYMPTOMS UNTIL THE THIRD DAY.

BY ENGLEDUE PRIDEAUX, L.R.C.P., M.R.C.S., &c.

W. T——, aged twelve, was playing with two other boys on the morning of Feb. 24th. The boys had hazel sticks about two feet long and half an inch in diameter, pointed at one end and cleft at the other, and in the cleft they fixed stones. One boy in slinging his stone let the stick slip, which went off with the stone and struck the patient in the right eye, entering by the pointed end. The boy pulled the stick out and walked home, about a mile, and told his father he had been struck in the eye. His mother bathed the eye, which appeared uninjured, and thought no more about it. They remarked that blood came from his nose and mouth. However, the boy remained well until the following Saturday. When he got up that morning his eyelids were so swollen he could not open them; he complained a good deal of pain. His eye was poulticed, but he was not kept in bed. He took his meals; and beyond complaining of the pain was not otherwise affected. In the evening, after he had taken his tea and gone to bed, he was found insensible, and I was sent for. When I arrived the boy was quite unconscious and very restless, turning over and over. Pulse 120, regular; temperature 101°. The eyelids were so much swollen I could not open them. A little pus was oozing out at the inner angle of the eye and some coming down the nostrils. He was quite unable to swallow. I placed a little calomel upon his tongue. The next morning he was quieter, his attention could be arrested by shouting to him. I got him to swallow a few spoonfuls of milk. Pulse and temperature the same. He died the same night, becoming more and more comatose during the day.

I made a post-mortem examination, and found a small external penetrating wound at the inner angle of the eye, but all the structures of the eyeball were quite uninjured. Internally I found a small ragged hole, large enough to admit the little finger, at the junction of the sphenoid and ethmoid bones. The under surface of the anterior lobe of the right cerebrum was completely destroyed. On placing the brain in water it all washed away, leaving a large ragged cavity the size of a duck's egg, and in which were two pieces of bone each as large as a threepenny piece. The whole brain was highly congested, with a patch of fresh lymph as large as a shilling under the dura mater at the vertex.

Wellington, Somerset.

PRESENTATION.—On the 9th inst. Dr. Scott Orr, on behalf of the nurses of the Glasgow Royal Infirmary, presented Dr. Thomas, for fifteen years superintendent of the infirmary with a large and handsome silver tray, bearing a suitable inscription. The testimonial was given as a token of the regard of the donors for Dr. Thomas, and as an evidence of their high sense of the efficient manner in which his various duties had been performed, and of the kindness which he had invariably shown to them.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

MIDDLESEX HOSPITAL.

TWO CASES OF FRACTURE OF THE SKULL IN YOUNG PATIENTS.

(Under the care of Mr. GEO. LAWSON.)

THE two following cases show from what severe injuries of the head young patients may recover. In the first case there was an indented fracture of the skull; and although there was a considerable depression of bone, yet, with the exception of a slight drowsiness for a few hours after the accident, the child had no cerebral symptoms, and left the hospital after three weeks quite well; indeed, he was only detained in the hospital because it was probable that some head symptoms might arise. The second case is very remarkable. The child fell the height of seventeen feet from a loft on to the stones below. There was without doubt a fracture of the vertex extending into the base of the skull, as was evidenced by the repeated vomiting of blood, the altered shape of the skull, and the intense and prolonged coma. The child was admitted on September 30th in a state of deep coma, and she remained in a state of unconsciousness five days, until October 5th, and unable to swallow any food except three teaspoonfuls of milk on the afternoon of the 4th. During this period she was fed with nutrient enemata. To account for this prolonged insensibility there must have been severe brain lesion, and yet the child has recovered, and now, without any apparent discomfort, is able to play with her toys, and behave as if she suffered no inconvenience from the injury. Another interesting point in the case is the time which elapsed before she was able to speak. It was not until the sixteenth day after the accident that she could be induced to answer any question, although, apparently, she often tried to say something.

CASE 1. *An Indented Fracture of Skull; very Slight Head Symptoms; Recovery.*—John G——, aged sixteen months, was admitted into Bird ward on July 8th, 1882, with an indented fracture of the skull. Shortly before being brought to the hospital the child fell off a high stool, and in his fall his head came into direct contact with the abrupt end of the leg of another stool which had been overturned.

State on admission.—There was a depression in the skull just above and to the left of the occipital protuberance, which corresponded exactly to the end of the stool. The depression was about one-tenth of an inch deep, visible to the eye, and the sharp edge of the surrounding bone could be easily felt with the finger through the integument. The child seemed drowsy, but, with this exception, there were no cerebral symptoms. The anterior fontanelle was not completely closed, but the posterior fontanelle was quite filled in with bone. An ice-bag was applied to the head, and the child kept quiet in bed.—9th: The child seems very well, and in no way affected by the accident. He soon recovered from the drowsiness, and eats and sleeps well, and plays well.—20th: The child has been kept in the hospital lest head symptoms might arise. He is very well and cheerful. The indentation, so marked on admission, is much less, the depressed bone having been partially raised towards the surface.—31st: As the child seems quite well he was discharged from the hospital. There was still a slight depression of the bone.

CASE 2. Ethel D——, aged six, was admitted into Bird ward on Saturday afternoon, September 30th, 1882, having just fallen from a stable loft on to the stone paving below, a height of seventeen feet. She was standing on a chair playing, when she tipped forwards and fell head foremost on to the paving, her head first striking the ground.

State on admission.—The child was in a state of profound coma. The left side of the head was very large from an extensive hæmorrhage beneath the scalp. Soon after her admission she vomited a quantity of blood, and twice the next day threw

up blood, but in less quantity. She was unable to swallow, and a teaspoonful of milk put into the mouth ran out again. Ordered an ice-bag to the head, and to have an enema of beef-tea and an egg, an ounce and a half every four hours.—Oct. 1st: The child still lies in a state of coma. Has vomited once some blood. Neither moves nor speaks. To continue the enema, as she is unable to swallow.—2nd: The child remains in the same unconscious state, but she shifts her position and draws up her legs, and is at times restless. She is unable to swallow. To continue the enema.—3rd: Still unconscious and unable to swallow; and although repeated attempts are made to give the child a teaspoonful of milk, it always runs out of the mouth. As she is very restless, and with difficulty kept in bed, a wooden frame has been placed around the bed, to keep her from falling out. To continue the enema.—4th: To-day the child seems to be better. She is still very restless. During the afternoon she swallowed about three teaspoonfuls of milk. As the bowels have acted twice the enema is given at longer intervals.—5th: The improvement has continued. She has taken half a teacupful of milk by the mouth, and is gradually regaining consciousness, and will look up when spoken to. The swelling of the side of the head is much diminished, but still there is fluctuation beneath the scalp on the left side of the head. To continue enema.—6th: The child is much better; she sits up in bed, and takes food. Ordered chicken, and milk with bread-and-butter. Omit enema. She has not yet spoken, although she clearly understands what is said to her. From this time the improvement continued. She began to play with her toys, and to take an interest in things around her. She would frequently try to speak, but was apparently unable to do so. The first time she spoke was on October 15th, when she answered "Yes" to a question put to her by the nurse. For the next two or three days she could only be induced to say "Yes" or "No."—24th: The child is now rapidly approaching convalescence. She talks freely, and plays all day on the bed with her toys. The blood beneath the scalp has been absorbed, and the left side of the head (the part on which she fell) is considerably flattened, but it is gradually regaining its natural shape. She has never complained of any pain in the head. There have been no paralytic symptoms either of the extremities or any of the parts supplied by the cranial nerves. The child will be kept for some weeks under observation in the hospital.

NORTHAMPTON GENERAL INFIRMARY.

A CASE OF ACUTE CHOREA COMPLICATED BY PERICARDITIS, ENDOCARDITIS, CELLULITIS, ETC.

(Under the care of Dr. FRANK BUSZARD.)

FOR the following interesting notes we are indebted to Mr. J. Oswald Lane, assistant house-surgeon.

J. D——, aged fifteen, was admitted on June 19th into the hospital with the following history:—He is one of a family of eight children, all of whom are rather delicate, but the patient himself has never been laid up before the present illness; has never had rheumatism; no history of shock or of overwork of mind or body; has always been a sharp lad, and no members of the family have been affected with nervous disease. The first appearance of the present illness showed itself on June 6th, when he was seized during the night with excruciating pain in the right leg, followed the next morning with "snatching" of the muscles of the right half of the body, though both sides of the face were affected. These movements became gradually more marked and general. Two days before admission he first began to wander, while at times insensible; at others very noisy; cracking of skin also noticed.

On admission the choreic movements were general and of the most marked form, especially so of the face and arms. He was very noisy, crying out furiously; at times sensible, but unable to answer in articulate sounds. Skin very dry and cracked, lips fissured, tongue brown, covered with sordes. There were distinct signs of hyperæsthesia; pupils dilated and sluggish to the action of light. Pulse 120; temperature could not be taker.

June 20th.—Passed a very noisy and restless night, delirious at times though occasionally sensible; spasmodic movement of the muscles still just as marked, and is unable to articulate words or swallow.—21st: Much quieter, whilst the choreic movements have almost stopped; power of articulation and swallowing just the same, while the respiration is very jerky; there is a distinct pericardial murmur with no increase of dulness. Pulse 124. Urine shows an increase of urea.—23rd: Movements still present; can now swallow liquids; sometimes utters articulate sounds and nods when asked questions. Area of cardiac dulness increased, friction; bronchitic sounds; signs of inflammation in left forearm; also of right wrist and hand. Pulse 130; respiration 35. Temperature, morning 99·6°; evening 98·6°.—25th: Choreic movements abated. Can now say some few words, such as "Mother," "Nurse," "Yes," "No." Sordes less; bronchitic sounds to be heard, while the cheeks are flushed. Incision was made into the left forearm, when a large amount of pus was evacuated. Skin still cracked. Pulse 128; respiration 38. Temperature, morning 99°; evening 100°.—26th: Pulse 133; respiration 32. Temperature, morning 100°; evening 100·2°. Cellulitis still increasing, as also the area of cardiac dulness.—27th: Temperature, morning 100°; evening 100·2°.—28th: Temperature, morning 100°; evening 100·4.—29th: Temperature, morning 98·8°; evening 102°. A large amount of purulent discharge from the incision made into the left forearm; right hand swollen, but no feeling of fluctuation. Tongue cleaner; appears better though still extremely prostrate; choreic movements have entirely disappeared; he is able to speak more distinctly, but only a few monosyllables. Bowels confined; appetite improved. Respiration 30, at times irregular and laboured. Pulse 132.—30th: Temperature, morning 99°; evening 102·2° Discharge copious.

July 1st.—Temperature, morning 102°; evening 101·8°.—3rd: Temperature, morning 100°; evening 102·4°. An incision was made into the palm of the right hand, when a large amount of curdy sanguineous pus exuded. Abdomen tympanitic; heart's area of dulness has gradually increased, no endocardial murmur to be heard; appetite improved. Pulse 126, not wiry; respiration 32.—4th: Temperature, morning 99·6°; evening 103·8°; discharge copious.—8th: Temperature, morning 100°; evening 103·2°. Discharge from right hand, though copious, has diminished in quantity; some swelling of the right arm below elbow; no joints affected; area of cardiac dulness has increased downwards, and towards the axillary line no exocardial murmur, but a distinct soft systolic murmur can be heard at the apex; tongue fairly clean; takes nourishment well; some flatus. Pulse 128; respiration 32.—9th: During last night he perspired copiously and does not seem so well this morning; this was accounted for by a collection of deep-seated pus in the right forearm, which was evacuated by incision. Temperature, morning 101·2°; evening 102·2°.—13th: The patient has improved the last few days; his temperature has gradually defervesced; his speech is much improved, as he now talks correctly but slowly; expression brighter and tongue clean. Temperature, morning 99°; evening 99·2°.—19th: The last two days his febrile symptoms have become marked, while he complains of tenderness in right palm of hand, and some slight pain in right thigh. Temperature, morning 98·8°; evening 102·2°.—20th: Another incision was made into the right hand, giving a free exit for purulent matter; during the next few days the febrile symptoms greatly diminished, and he improved rapidly in general health.—30th: From the time of the last notes the patient has gone on gradually improving, his temperature has been normal for several days, and all the discharge has stopped. He is now allowed out of bed; the systolic murmur has become much more marked, and can be heard over a larger area than previously. He was discharged on August 6th convalescent, the systolic mitral murmur alone remaining.

Medicinal treatment.—During the first ten days after admission small doses of chloral and digitalis were administered, followed then by the liquor cinchonæ (Battley's) in five-minim doses every four hours. He was kept on the latter treatment for one week, when sulphite of magnesia in twenty-grain doses every four hours was administered. This was continued for three weeks, when iron and quinine were given him till his discharge.

Remarks.—This case here recorded has several features of interest in connexion, amongst which may be enumerated:—1. Marked choreic movements developed themselves previous to any apparent signs of pre-existing peri- or endo-cardial mischief, inasmuch as the physical signs which manifested themselves on the third day after admission were those of commencing pericarditis, as the subsequent history of the case will show. 2. Pericarditis followed

by endocarditis presented itself without any assignable cause; there was an entire absence of any rheumatic history in *propriâ personâ* or hereditary. 3. The severe phlegmonoid inflammation of the cellular tissue which developed itself; this probably being of a pyæmic nature, dependent upon the existing cardiac complication. 4. The acuteness of the attack in the male sex, with subsequent recovery.

ESSEX AND COLCHESTER HOSPITAL.

UNUNITED FRACTURE OF OLECRANON; ENDS UNITED BY OPERATION; CURE.

(Under the care of Mr. LAVER.)

CHARLES C——, aged thirty, a mariner, was admitted on Oct. 27th, 1881, for ununited fracture of the olecranon. On examination the two portions of bone were found to be sufficiently apart to allow two fingers to be placed between them. This separation caused loss of power, and there was also some tenderness on pressure. The accident (a fall on the deck at sea) by which the fracture was produced occurred on August 13th, 1881. His arm was properly placed on a splint, but with the result above mentioned, and it was determined to try to unite the fragments, and for this purpose on November 4th an operation was performed under full antiseptic precautions. The bones were exposed, scraped, drilled, and wired together with stout silver wire, the joint syringed out with carbolic water, and the arm placed on a front splint. On the 6th the limb was dressed; there was a slight stain of discharge, but no inflammation. On the 11th it was dressed again, and the stitches were removed. On the 20th it was dressed, and then there was no discharge. When dressed on the 25th there was no discharge, and the wound was healed.

On December 22nd, the wire in being removed snapped off and could not be taken out. The patient could move his arm freely without pain, and union had taken place, and he was discharged on leave of absence.

Jan. 2nd, 1882.—Patient returned, complaining of a pricking sensation; it was found to be caused by the broken wire, which was cut down upon and removed.

Feb. 6th.—Long extension splint, which had been on his arm, removed. On the 20th he was discharged cured, with perfect union and full power.

Remarks.—The case was kept a long time on the splint in consequence of the man's occupation, and the unfortunate accident of the wire breaking in further lengthened it.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

The Endemic Hæmaturia of the South-east Coast of Africa.—The Life History of the Liver Fluke.

THE ordinary meeting of this Society was held on the 14th inst., J. Marshall, Esq., F.R.S., President, in the chair. There was an unusually large attendance of Fellows and visitors. The evening was devoted to the interesting subject of parasitic diseases, especially the Bilharzia and Fasciola hepatica. A paper on the former subject, written by the late Dr. Lyle of Durban, was communicated by Dr. J. Harley; and Drs. Cobbold and Crocker exhibited specimens of the parasite and allied forms. Mr. Thomas related his admirable research into the life history of the liver fluke. He deserves the credit of having conclusively determined the species of mollusc that acts as intermediary host of this parasite, so destructive to our flocks. He exhibited numerous specimens, and his relation of the developmental changes of the fluke was illustrated by diagrams. Other specimens of parasites were exhibited by Professor Ray Lankester, Dr. Bastian, and Dr. S. Mackenzie.

The following is an abstract of the paper on the Endemic Hæmaturia of the South-east Coast of Africa, by the late Dr. VASY LYLE, of Durban. (Communicated by Dr. JOHN HARLEY.) The author, in the first place, discusses the physical characters of the infested country, and the extent of the country infested. He states, as an almost completely proven fact, that the Bilharzia infests the whole eastern littoral of Africa, from Egypt to the Cape, and that the entozoon found amongst the people of the Nile valley is identical with that found in South Africa. It appears to inhabit the sluggish parts of rivers and low marshy lands, and to be absent from high lands; the interior plateau of South Africa being free from the disease. The present immunity of Port Elizabeth is attributed to the substitution of rain water stored in tanks for that of wells and pits. Opportunities were obtained of examining the bladder in a case of the disease, and both the male and female parasite. The bladder in one case was healthy near the neck, but crossed thence diagonally to the fundus by fungous-looking growths, and the mucous membrane over these was granular and ulcerated, and contained embedded ova. One female Bilharzia was dissected out. The author agrees generally with the description given of the parasite, but differs in some minor points. In reference to the symptoms and progress of the disease, the author remarks that no symptoms of the affection have been observed antecedent to the appearance of the hæmaturia, the general course of the disease being that described by Dr. Harley in his communications to the Royal Medical and Chirurgical Society. Illustrative cases are given, and one of them contains the evidence of a Kaffir on the prevalence of the disease amongst the natives.—Dr. COBBOLD had brought to the Society specimens of urine from five out of seven cases that had been lately under his care. One of these, which a year ago was loaded with blood, was now quite clear, but still contained ova, and the ciliated embryos hatched from them were shown under the microscope. He also exhibited specimens of the adult Bilharzia sent him by Professor Leuckart and Sir J. Fayrer, as well as specimens of the parasite from oxen and sheep, differing from the human varieties in the spindle shape of the ova. After referring to the discovery of the parasite by Bilharz in 1851, and his own discovery of it in a monkey in 1857, the speaker said that its clinical bearings and geographical distribution were dealt with by Dr. J. Harley in his paper read before the Society in 1864. The parasite had since been found in India as well as in Natal. Although from analogy it was thought to have its intermediate host in molluscs, the variety of mollusc had not been found—probably not a British form. He described the three modes of dealing with the disease as the "heroic," the "do-nothing," and the "rational" plans of treatment. Of the first Dr. Allen had lately given an example, advocating injection into the bladder of saturated alcoholic solution of santonin. This produced severe cystitis, and the fact quoted in support of its efficacy, that the patients did not return for further treatment, was capable of an opposite inference to that given by Dr. Allen. The second plan was based on the idea that patients will out-grow the affection. But Dr. Cobbold had under his care in 1870 a girl who was passing an enormous quantity of the ova, and is now strong and well. The treatment then adopted was tonic and nutritious, which succeeded, he believed, in saving her life. He therefore recommended treatment to support the system—quinine and iron, ample food, &c. Buchu was useful, and in bad cases it might be well to try such parasiticides as perchloride of mercury, given internally.—Dr. CROCKER referred briefly to the case from which the embryos and ova of Bilharzia that he exhibited were taken. In that case the hæmaturia, which had been profuse, was now almost absent; but ova were still being found. The nature of the disease was detected by examining the clot microscopically.—Dr. J. HARLEY believed that the parasite gained ingress into the bladder through the urethra while bathing. It is not common in females, but almost every lad in infested districts suffers from it, and it was a practice with the natives to tie a tape round the penis to prevent its entrance. Although in Cairo the disease seemed to be taken by drinking water, in Natal, the view he held seemed more likely, especially as the parasite was located in the pelvic organs. He had early advocated treatment by injections into the bladder, and had used iodide of potassium and oil of male fern for this purpose. Dr. Harley referred to a case so treated with success. As to the apparent disappearance of the disease, mentioned by Dr. Vasy Lyle, Dr. Harley cited an instance of two young men from Port Elizabeth, who were said to have had the disease in boyhood and were supposed to be free from it when seen by him (Dr. Harley). But he found ova in the urine of each, and had later to attend them for attacks of renal colic and oxalic calculi. Dr. Harley concluded by referring to the author of the paper, who was a type of the

honest scientific worker, and who seems to have been the only medical man in South Africa who had devoted such labour and patience to the investigation of this disease.

At the invitation of the President, Mr. A. P. THOMAS, M.A. (of Oxford), then described his researches into the Life History of the Liver Fluke, researches which had been undertaken at the request of the late Professor Rolleston on behalf of the Royal Agricultural Society. After mentioning the ravages made by the liver fluke (as many as 3,000,000 sheep being lost by it in this country in the year 1879–80) and referring to the fact that hitherto the search after the particular mollusc supposed to harbour its larval form had been futile, Mr. Thomas described his plan of work. He thoroughly searched meadows for every species of mollusc likely to be an intermediary host, dissecting them without success, until at length he succeeded in finding in the small Limnæus truncatulus, a cylindrical worm or Reedia containing cercariæ. The cercaria is of tadpole shape, and has the peculiar habit of encysting itself directly it is brought into contact with any solid object, the material for encystation being exuded from some lateral masses in the body of the larva. For some time the inquiry was arrested because of his inability to find any more specimens of the Limnæus truncatulus, even where they had abounded in the previous year. In last July, after floods, however, he found an ample supply in the flooded meadows. The snail in question is more truly amphibious than a water snail, is very small—about a quarter of an inch long—and wandering along the damp roots of grass, its presence may readily be overlooked. He now proceeded with infection experiments, and succeeded in proving that this mollusc was the sole intermediary host of the common fluke. At the same time he was enabled to study fully the metamorphosis of the latter. The liver fluke is very prolific, but so long as the ova remain in the liver they undergo no further change. In artificially hatching them, the embryo is seen to leave the egg by the sudden giving way of the operculum; and once in water the cilia with which the body of the embryo is covered came into action. The free swimming embryo has a spindle shape and is provided with a double eye spot (two masses of pigment), and is very sensitive to light. If the embryo comes in contact with a Limnæus truncatulus it begins to bore into its shell, the head papilla becomes elongated and sharp, and by a sudden movement the boring is effected, and the body of the embryo passes into the snail. As soon as it gets into the snail the body contracts, its outer layer is cast off, and it degenerates into a sporocyst. By proliferation of cells lining the body cavity and of cells in the body walls, masses of germinal cells are formed from which the cercaria is developed. The sporocyst usually develops in the pulmonary cavities of the snail and the parasite gets into the liver, feeding on the liver cells. The cercaria is formed by the rounded germ-masses becoming elongated, one end being pinched off to form a tail. When the cercaria has escaped and become encysted, it remains quiescent until swallowed by the sheep; when the cyst being dissolved the embryo fluke finds its way into the liver ducts of the sheep. Mr. Thomas concluded his statement by pointing out that the real preventive of the disease is salt, a small quantity of which will not only kill the larvæ of the fluke, but the Limnæus also. The salt should be scattered over all land where the snail is believed to be present. It had also been found useful to feed sheep on salt, and this had been long a practice among farmers who had found it valuable in preventing sheep rot, but who had not thoroughly carried it out. Many other animals, including man, were liable to be infested by flukes, and in the case of man the parasite might be introduced through watercress.—Dr. COBBOLD said that he exhibited specimens of flukes from the elephant, giraffe, &c., and that even whales, porpoises, and dolphins were liable to such parasites. He thanked Mr. Thomas for having conclusively proved the Limnæus truncatulus to be the intermediary host of the common fluke; and remarked that, curiously, a year ago he had believed that Leuckart had made the same discovery. But he had since heard that Leuckart thought it was another species of Limnæus, so that Mr. Thomas had succeeded in a search which the great German helminthologist had been so long pursuing.—Dr. J. HARLEY mentioned the case of a labourer who died from this disease, twenty-six flukes being found in the hepatic ducts, and the symptoms being most obscure. It was ascertained that his diet had consisted chiefly of bread and cheese, often accompanied by watercress.—Dr. MACLAGAN mentioned that a gentleman in Dorsetshire had told him that in 1879–80 he had lost none of his sheep from this disease, whilst all round there was great mortality. His immunity was attributed to his flocks being fed with salt.—The PRESIDENT thanked Mr. Thomas for his lucid exposition, and pointed out the great importance of the study of diseases of animals as throwing light on those of man, and of the importance of prevention in such diseases. It was a reproach that our troops should be exposed to such disorders, when the means of prevention were not far to seek.

CLINICAL SOCIETY OF LONDON.

Hysterectomy.—Spina Bifida.—Diastasis of Clavicle.—Local Treatment of Diphtheria.

THE ordinary meeting of this Society was held on Friday, Nov. 10th, Mr. J. Lister, President, in the chair. For the first time, in accordance with the new regulations, card specimens were shown. The President announced that he had heard from Prof. Pantaleone of Rome, expressing his gratification at the honorary membership of the Society recently conferred upon him. Mr Clutton's cases of spina bifida excited a good deal of discussion, at the close of which the President nominated Messrs. Clutton, Pearce Gould, Howard Marsh, and Parker as a committee to inquire into and report to the Society upon the results of Dr. Morton's treatment of this deformity.

Mr. GOLDING BIRD narrated a case of Removal of a Fibroid Tumour, with Extirpation of the Uterus, that had ended fatally. The patient was thirty-seven years of age, and had had the tumour for three years. Its increasing size, the pain and weight accompanying it, and the repeated and prolonged attacks of nausea occasioned by it, compelled her to seek surgical relief. The tumour—the size of the uterus at six months—grew from the anterior wall of the cervix, and lay between this and the bladder, with the latter of which it was intimately connected. The uterus itself was all but drawn out of the pelvis, and the two ovaries, both cystic, could be felt through the abdominal parietes, and prior to the operation were thought to be bosses on the tumour. The operation was fully described, and special mention was made of the use of an apron of green carbolised protective well tucked in over the intestines when the abdomen was opened, whereby they were easily kept out of the way and sheltered from the spray. The tumour had its peritoneal investment circumferentially divided where it was reflected on to the pelvic walls or viscera, and it was then shelled out from its bed, the broad ligaments being previously divided. The union with the uterus was intimate, and had to be severed, while the connexion of the fibres of the tumour with those of the bladder rendered the operation very difficult. All bleeding was stopped with carbolised silk ligatures, and the peritoneum, where divided between the rectum and bladder, was united with a continuous suture at the completion of the operation. The uterus and ovaries were removed after the tumour, a pedicle being formed out of the cervix uteri; it was tied in four parts, as in Erichsen's method of tying nævi. Before the closure of the peritoneum a rent in the bladder had to be carefully sewn up; a catheter was tied in. The general conduct of the case was like that of ovariotomy. For forty-eight hours all went well, and then severe vomiting set in, which eventually exhausted the patient, and caused her death on the fourth day. The post-mortem showed repair to have been perfect as far as it had gone; there was no evidence of the urine having passed beyond the limits of the bladder. There was no suppuration, and only slight pelvic peritonitis. There did not seem to be enough to account for the vomiting, and the author explained this symptom as depending upon some idiosyncrasy of the patient, inasmuch as when she had typhoid fever ten years before, vomiting severe enough to threaten life was then the most prominent symptom. The specimens removed at the operation and the parts reserved at the post-mortem were exhibited.—Mr. KNOWSLEY THORNTON would like to ask Mr. Golding Bird as to two points in the case which his record seemed to omit: What was the pulse rate? He did not attach much importance to temperature alone in these cases, but had frequently seen patients die of incessant vomiting without any marked high temperature, but with a constantly ascending pulse. He believed such deaths were from septic absorption. In

this case everything was specially favourable for such a result, in spite of the use of Listerian details, because the uterine stump, which always contains causes of putrefaction, was ligatured and then enclosed with a mass of other wounded and ligatured tissues in a space between the closed peritoneal flaps and the tissues forming the floor of the pelvis, with no possible outlet for effused materials except through the cervical canal, which was closed by the constricting ligatures. Supposing the fluids in this space putrefied, as was most likely to be the case, their only outlet was through the sutured flaps into the peritoneum, and, doubtless, this was the origin of the eight ounces of red serum found there after death. The wounded bladder, with catheter tied in, would also be a very likely centre for sepsis spreading into the peritoneum. The absence of anything to account for death, when the post-mortem is made, is a special feature in these cases of septicæmia. The very peritoneal absorption which causes death itself removes the evidences. The second point he would ask for information upon was, What was the sufficient reason for such a serious operation? Mr. Bird had stated that the patient was in fair health, and that menstruation was not excessive. The fibroid was evidently quite a small one. What was the justification for this fearful operation? The authorities had long laid it down as a rule that hysterectomy for fibroids was only justifiable when life was in danger, either from hæmorrhage, excessive growth of the tumour, or some other cause. The mere wish of the patient ought not to be considered in these cases. He had himself on some previous occasions expressed sanguine views as to the future of hysterectomy, but recent observations and experience had led him to modify these views somewhat, especially as it was becoming the fashion to remove the uterus for fibroid disease in cases in which there were no urgent symptoms. The results of the operation recently in this country by the wire serre-nœud, and in Germany by the elastic ligature, were very encouraging, but the operation was still a very dangerous and formidable one, and ought only to be undertaken in grave cases. From what Mr. Bird had said as to the condition and position of the ovaries in this case, it seemed to have been a specially suitable one for removal of the uterine appendages, and this has been proved to be a much safer and a more successful process. Mr. Lawson Tait had pointed out a fact which he himself could corroborate—viz., that the ovaries are very commonly cystic along with fibroids of the uterus. Mr. Tait thought that the cystic ovaries cause the fibroids, but they are too often absent for this to be true. Mr. Thornton was long very sceptical as to the cure of fibroids by the removal of the uterine appendages, but he had now convinced himself that Mr. Tait was right in this matter. He had tried the operation in a small number of carefully selected cases, and had met with uniform success; all the patients had recovered; and all in the course of from five months to a year had lost their fibroids by gradual absorption. He did not attribute the result to the mere removal of the ovaries, but chiefly to the great alteration in the blood-supply, when all the enlarged vessels about the ovaries and tubes were tied. He had tested the operation in cases of subperitoneal fibroids, mural fibroids, and fibro-cystic disease, and in all the result had been equally good. With the statistics of this operation as to mortality, he did not think hysterectomy was justifiable without a previous trial of the safer operation of removal of the uterine appendages. At the same time it must be remembered that this operation was often a very difficult and dangerous one, and might end in the necessity for the performance of the still more dangerous hysterectomy from uncontrollable hæmorrhage. This accident happened to himself in two of his early cases. In reply to a question from the President, Mr. Thornton said that his cases of removal of the uterine appendages had not only all recovered, but had in course of time their uteri restored to their normal condition.—Mr. GOLDING BIRD replied that Mr. Bryant had advised him to proceed at once to removal of the entire organ rather than attempt incision of the uterine appendages at first. He had relied more upon the temperature than the pulse, especially as the patient was liable to great rapidity of the pulse from emotional causes.

Mr. CLUTTON related a case of Spina Bifida cured by Injection of Iodine. When three weeks old a child was brought to St. Thomas's Hospital, and was found to be a well-nourished, healthy child, with the exception of the above imperfection. The spina bifida was situated in the lumbar region, small, and with exceedingly thin walls. The impulse when the child cried was very marked, and the aperture in the lower canal large. There was no paralysis of the lower limbs, and the cyst, examined by transmitted light, did not appear to contain the cauda equina. The skin had been so stretched that the walls were quite translucent, and would evidently have soon given way and allowed the fluid to escape. A week after it was first seen, and when the child was four weeks old, the cyst was injected with a drachm and a half of Morton's fluid, as little as possible of the contents of the sac being allowed to escape; a pad with collodion and bandage completed the treatment. The mother was instructed to keep the baby on its back, and prevent, as far as possible, the gravitation of the fluid into the vertebral canal. The constitutional disturbance was very slight, and on the third day the child was in its usual health. The cyst began immediately to shrink, and by the end of a week the skin was in loose folds. At the end of the third week there was nothing to be felt of the spina bifida, except a small puckered lump of cutaneous tissue. Mr. Clutton also mentioned a case of Occipital Meningocele, which he had treated by injection of iodo-glycerine without any effects, good or bad. And also another case of Lumbar Spina Bifida, with a very thin sac, in which the injection of about a drachm of the iodo-glycerine solution was immediately followed by the sudden death of the child.—Mr. MORRANT BAKER asked whether in the last case any fluid was withdrawn previous to the injection, and also what position the child was placed in. The record of such cases was very valuable as a guide to practice.—Mr. PEARCE GOULD asked Mr. Clutton whether in his first case the sac was covered with skin, and whether the fluid withdrawn contained sugar. The most favourable cases for injection were those in which the deformity consisted only of a hernia of the dura mater, the fluid being arachnoid fluid. As an instance of the fact that spontaneous cure occasionally occurred in the worst cases, he described a case of a very emaciated infant who was recently under his care with a large lumbar spina bifida which had burst, and a great part of the sac had sloughed; yet the tumour underwent a spontaneous cure, although the child died of marasmus.—Mr. A. E. BARKER had operated upon a case very much like the last one referred to by Mr. Clutton. The child was kept upon his back for some time after the injection. The operation had not the slightest effect upon the tumour, and he heard later on that the tumour burst and the child had died.—Mr. HOWARD MARSH mentioned the case of a child four months old. The tumour was not large, covered by fairly healthy skin, but was increasing. He injected the tumour with about one drachm of the iodine solution; the child became completely collapsed and died immediately after the operation. At the Children's Hospital the results on the whole have not been successful.—Mr. C. HEATH said that the injection of iodine into the cavities of the brain and spinal cord was not necessarily fatal. He had had under his care a case of anterior meningocele in a child six years old which had been previously injected with iodine by Sir James Paget without injurious effects. He thought that talipes calcaneus was very common in these cases.—Mr. R. PARKER had injected about twelve cases without meeting with any fatal result like Mr. Clutton, or other visible effect of the injection, but he had had only one successful case. The result depended upon the size of the spinal aperture, and whether the spinal cord were involved or not. In his successful case the sac was covered with healthy skin, and he injected less than half a drachm of the fluid every week for some weeks. He thought talipes calcaneus was not always present, in some cases it was unilateral or equino-varus.—Mr. GODLEE added a case to the list of successful cases. The tumour was small, with a thin wall, and was cured by a single injection.—Mr. BENNETT had had only one case of this kind, and there the injection was unsuccessful. The sudden death after the injection of the tumour might be a mere coincidence in some cases, as was shown by a recent experience of his own. Not long ago he planned to inject a spina bifida on a certain day, but owing to the child being then unwell he postponed it, and the child died from convulsions while going home in the omnibus.—Mr. MORRANT BAKER mentioned a case in which the tumour was cured, but hydrocephalus increased, and gradual loss of power in the lower limbs came on.—Mr. CLUTTON said that in all his cases the child was kept lying on the back, and he injected slowly; he only withdrew a small quantity of fluid, and that gave a distinct reaction of sugar. In both cases

there were patches where there was no skin at all, and the sac was like tissue paper. In the first case there was no raw surface, in the latter the sac was partly ulcerated. The aperture of the sac into the theca vertebralis does not correspond with the size of the aperture in the bones.

Mr. CHRISTOPHER HEATH related a case of Separation of the Epiphysis of the Clavicle by Muscular Action. A boy, aged fourteen, whilst raising his arm violently to bowl at cricket felt something give way at his collar-bone. The inner end of the clavicle was found to be unduly prominent, and presented a sharp edge beneath the skin, quite unlike the smooth end of a bone, covered with articular cartilage. The supra-sternal notch was quite distinct and equally defined on both sides, and a thin lamella could be felt on the right side, intervening between it and the gap caused by the starting forward of the inner end of the clavicle. The treatment consisted in laying the patient down, when the bone at once slipped into its place, and it was retained by a plaster-of-Paris bandage. Mr. Heath referred to the great rarity of the accident, and the diagnosis of it from dislocation of the clavicle, and insisted upon the great utility of the plaster-of-Paris bandage in fractures of the clavicle and humerus.—Mr. LISTER said this case was exceedingly interesting and rare, if not unique. The diagnosis was no doubt correct, both from the sharpness of the projecting fragment and the presence of the lamella in the site of the injury.

Dr. GOODHART read a paper on Six Cases of Diphtheria treated by the local application of Borax or Boracic Acid. In four a saturated solution of boracic acid in glycerine was used, the application being made in part by a hand spray, in part by the laryngeal brush, and as often as every two hours in some cases. In the other two a diluted solution of the glycerine and boracic acid was used. The first case was a very severe one, and it died from renal complications on the seventh day; but the boracic acid and glycerine seemed to be so successful in relieving the throat symptoms, and in preventing the re-formation of the membrane, that it was determined to try it again. Of the other five three had croup as well as membrane on the fauces; one had nasal diphtheria; all had albuminuria. All recovered. Tracheotomy was necessary in one case, and the glycerine and boracic acid were freely applied to the interior of the trachea and larynx from the wound, and to the surface of the wound itself, and it seemed to be very beneficial in loosening, dissolving, and preventing the re-formation of membrane. In another case it is believed that tracheotomy would have been necessary had not the vigorous application led to the expulsion of membrane by the mouth. In all cases it seemed to give such relief that very little difficulty was experienced in carrying out the treatment. Both borax and boracic acid have been occasionally in use as a topical application in diphtheria, doubtless, for a long time past, but not, so far as is known, with any decided success; nor can it be supposed that any remedy will not often show a good proportion of failures in combating a disease such as this. It is enough to say that these agents are known to be good antiseptics, that their action is harmless when not beneficial, and that they are certainly useful in some cases.—Dr. PHILLIPS had carried out the treatment in the first of Dr. Goodhart's cases. He referred to two other cases similarly treated, in each of which tracheotomy was performed in a few hours, and every attempt to remove the membrane was made; but the children died, and in each case the membrane was found extending down into the smaller tubes. The strength of the solution is one part of glycerine to three of borax diluted with an equal part of water when used as a spray.—Dr. O'CONNOR had notes of nearly forty cases of diphtheria, but he had not met with much success in the use of a watery solution of boracic acid. He thought the best application on adults is a solution of chlorate of potash. He had often found that the membrane reappeared on its original site, thinner but evidently of the same nature as at first.—Dr. LONGHURST thought the treatment was good because it was non-irritating; much good was not to be looked for from local treatment of a disease which is essentially constitutional.—Mr. LISTER remarked that each physician extolled his own application for diphtheria. He had received striking reports of series of cases without any fatal issue treated locally by tincture of iodine. But its infective character clearly showed it was a local disease. Boracic acid is a wonderfully efficacious antiseptic, as is seen when it is applied to putrid onychia, for example. It may very well act in this way on the membrane in diphtheria. Boracic acid, by the aid of heat, may be mixed in any proportions with glycerine.—Dr. GOODHART said that the constitutional nature of the disease was no argument against local treatment, as the disease is so often fatal from its local effects.

The following card specimens were shown:—1. A Case of Transpatellar Excision of the Knee, by Mr. Golding Bird. 2. A Man from whom the Tongue and part of the Lower Jaw were removed in 1876 for Epithelioma, no recurrence, by Mr. C. Heath. 3. A Case of Spontaneous Partial Dislocation of the Clavicle, in association with Lateral Curvature of the Spine from an unreduced Dislocation of the Hip, by Dr. Clippingdale. 4. A successful Case of MacEwen's Operation for Genu Valgum, by Mr. Keetley.

MEDICAL SOCIETY OF LONDON.

Congenital Cystic Hygroma.—The Treatment of Wounds.

AT a meeting of this Society, held on the 6th instant, Mr. F. Mason, President, in the chair,

Mr. EDMUND OWEN exhibited two cases of Congenital Cystic Hygroma, and read a short paper on them (see p. 845).—The PRESIDENT was not satisfied that the tumour on the side of the cheek communicated with the cyst beneath the tongue.—Mr. BRYANT remarked that the cases were seen in a later stage, and no communication between the larger tumour and the mouth was to be found. He advised enucleation and removal. In its present state the smaller tumour might be taken for a congenital nævus. In three cases he had noticed hygroma to be associated with imbecility.—Mr. OWEN, in reply, admitted that perhaps there was no communication between the two cysts in the first case, but he thought they were connected by fibrous tissue. In the second case, he thought the hygroma was degenerated. The difficulties of removal of the cyst in the first case were very formidable.

Mr. SAMPSON GAMGEE then read a paper on the Treatment of Wounds (see p. 840).—The PRESIDENT asked if Mr. Gamgee made any difference in treatment between hospital and private cases.—Mr. W. ADAMS coincided entirely with the principles laid down by Mr. Gamgee. The exclusion of air and water were the leading features of his own practice. Wounds from which air and water were excluded ran the course of subcutaneous wounds. He presumed that Mr. Gamgee excluded water as favouring decomposition. What did Mr. Gamgee use when wounds required to be washed? The principle of firm support and even compression was unduly neglected in modern practice. Richardson's colloid styptic he used extensively in his own practice, and knew nothing of the kind so valuable.—Dr. RICHARDSON suggested that it deserved to be determined by surgeons what was the precise thermometric indication for taking off the dressing from a wound. What account, in respect to rise of temperature, ought to be made for natural reaction? What degree of temperature should be considered as necessary to determine interference with the dressing? What time of continued increased temperature should be allowed to elapse before such interference? There ought to be a fair approximative general rule on this subject. Referring to the practice inculcated in Mr. Gamgee's paper, he said that in principle it dated long back. It was a treatment more or less in use ever since Friar's balsam was known as a remedy for wounds. It contained the true secret of Sir Kenelm Digby's expectant non-interfering method; it was the method enforced in a past century by Belloste; it was a method which, in this country, has from the last century into the present held its own. It had sometimes been supplemented by extraneous and fanciful procedures. Sir Kenelm Digby and his adherents had supplemented it by introducing, as an adjunct, the sympathetic powder with which the sufferer was taught to polish the weapon which caused the wound, as if that were a part of the cure; and in our day we had seen it supplemented by procedures which in future times would read, he believed, as equally unnecessary and nonsensical. Mr. Gamgee had brought the practice back to its true physiological bearing by showing that the sustainment of life in the injured part itself was the cause of success in healing, apart from any mysterious local surroundings or imaginary destructive agencies. In cases where there is bleeding from a wound that has been inflicted some time, and

from which there is offensive odour, Dr. Richardson agreed with the author that the iodised was more effective than the styptic colloid. He agreed equally in opposing the employment of water for dressing wounds, and recommended for cleansing purposes proof spirit, containing tannin and glycerine, a solution which was at once a good wash and a good styptic. Dr. Richardson concluded by urging that the profession ought to continue on the splendid historic lines that had been laid down for it in the past, and that if, instead of pursuing this course, it allowed itself to be led away by the hypotheses of men, however distinguished, who did not belong to it, and did not understand its practical work, it would go down altogether in fact as well as in estimation.—Mr. PAGE did not think the thermometer a sufficient index of danger by reason of the various nervous temperaments of the different patients, which determined a rise in temperature in the reaction after a wound. Mr. Gamgee's paper was based on sound physiological principles; but he could not agree with Dr. Richardson's strictures on Listerism, which he thought would always be regarded as an effort to restore natural conditions to the seat of the wound.—Mr. E. OWEN corroborated Mr. Page's remarks about the varying degrees to which the temperature might normally rise in different persons.—Mr. BRYANT agreed with Mr. Page that Mr. Gamgee's paper was based on physiological principles. He noticed that Mr. Gamgee seemed to advocate light pressure by bandaging, not the firm pressure he formerly recommended. He agreed as to the importance of immobility in wounds of soft parts. Mr. Gamgee had hardly emphasised the advantage of drainage as much as he might have done. To secure free drainage was a most important indication, and caution should be used in dressing wounds in such a manner that free drainage was not permissible. Though not a "spray and gauze" man in any sense, yet he had faith in the action of the drugs known as antiseptics, which obviated the tendency to decomposition induced by water. Mr. Gamgee eschewed water altogether in dressing. He recommended also his principle of letting wounds alone as much as possible. The degree of elevation of temperature was as important an indication as persistence of elevation. Isolated rises were of little consequence. Persistence after the second or third day was of much consequence.—The PRESIDENT had for many years practised Mr. Gamgee's method, as a rule in private practice, and occasionally in hospital practice, although this was rather difficult in a hospital imbued with the doctrines of Listerism.—Mr. GAMGEE, in reply, said he did not trouble too much about the arrest of bleeding. He shut the wound up as quickly as possible, and under this system he never had secondary hæmorrhage. It was on accurately fitting universal pressure that he relied, not on localised hard pressure. He never sealed wounds without allowing free drainage. The washing of wounds should be as slight as possible; too much was injurious. He could find no difference, physiological or practical, between boroglyceride and glycerinum boracis (B.P.), with an excess of bo[illegible]. He warmly advocated the study of Dr. Richardson's book on the healing of wounds, and mentioned certain facts showing the influence of mental excitement on the elevation of temperature in surgical cases. Many great operations were accomplished without any rise whatever. He treated private and hospital patients in precisely the same manner. The secret of Mr. Lister's success was the consummate skill and care with which those whom he had educated were trained to carry out their treatment.

EPIDEMIOLOGICAL SOCIETY.

A MEETING of this Society was held at University College, Gower-street, on Wednesday, November 1st, Dr. George Buchanan, President, in the chair.

Dr. NORMAN CHEVERS read a paper on the Sanitary Defects of the Site of London and its Environs, of which the following is an abstract. He was of opinion that notwithstanding all that modern land and town drainage had effected in the way of improvement, the most prevalent and worst diseases of the United Kingdom are due to the survival of thousands of acres of unreclaimed marsh land, and to the presence of thousands of miles of sewers, drains, and ditches, which retain, exhale, and exude as much as they void. The Celtic and Roman founders of London chose their position mainly because it was defensible in war, and without any knowledge of the laws of malaria. The superficial geology of London may be represented by an oval cup of London clay and brick earth, extensively traversed and margined by marsh alluvium across the longer diameter, of which irregular heaps of more or less sandy gravel form a broken line of slight elevation. The greater part of Roman London was seated on good building ground. Originally marshes or swampy soil surrounded the entire land aspect of modern London, with the exception of an isthmus on the north-west. The whole line of the northern hills had, at its foot, oozy soil, into which the drainage of the uplands sank, to be only partially carried off by streams. The City was also protected on the north side by Finsbury and Moorfields, formerly a vast swamp. To the east London is bordered by the extensive marshes of the river Lea and the Thames, and east of these marshes extend vast tracts of the Essex and Kentish marshes, sixty miles to the sea. The Kentish marshes extend also to the south border of London, and those parts of the City now bearing the names of Bermondsey, Southwark, and Lambeth, were especially notorious, almost down to the present time, for the occurrence of ague, dysentery, and remittent fever, amongst the inhabitants. Originally the marshes westward were as injurious to the public health as those to the east; Westminster was almost an island even in Queen Elizabeth's reign, and St. James's Park was liable to be flooded up to 1682. Even now South Belgravia is threatened with inundation from the Thames. Northward of this part of London the ground is more or less elevated, and gravel and clay are found more abundant. Dr. Chevers next pointed out that much of the ground upon which houses are now, and have been for centuries, built consists of made earth; for instance, that in Finsbury-fields in 1549 one thousand cartloads of bones were deposited, and upon this was laid the soilage of the City, all of which has long since been built over. He then briefly alluded to the significance of the Anglo-Saxon word *ey* in many of the place names of London, as showing that the localities were originally paludal; and mentioned a few facts which indicated the great prevalence in old times, and as late as the end of the seventeenth century, of dysentery and intermittent fever in London. Dr. Chevers urged the necessity for a great national movement for the reclamation and utilisation of marsh lands near London, and that a Royal Commission should be appointed to inquire into the whole question and adequate funds raised. He believed trees might be planted on the Essex and Kentish marshes which would in a few years mitigate the severity of the east wind; that all kinds of manufactures not requiring night service might be carried on there; and that market gardens and reservoirs for fish for markets might also be made, and thus render the lands not only more salubrious, but more valuably productive than they are at present. He concluded by saying that every landlord should be under legal obligation to satisfy his tenant whether the site of his house had been a marsh, a brickfield, a burial-ground, or a plague pit; whether the house is built upon concrete, and whether there are disused cesspools near the building. In the discussion which followed, the President, Sir Joseph Fayrer, Surgeon-General Hunter, Surgeon-Major Don, Dr. Thorne, Mr. Shirley Murphy, Dr. Henderson, Mr. Long, and Dr. Balfour took part.

NORWICH MEDICO-CHIRURGICAL SOCIETY.

THE first meeting of this Society was held on the 7th inst. at the Norfolk and Norwich Hospital, Dr. Barnes (Eye), the President, in the chair.

An exhaustive retrospective address of the work done during the past year was read by Mr. T. L. Lack.

Mr. F. C. BAILEY (Norwich) exhibited a specimen of a Double Fœtal Monstrosity, united apparently by the sternum; the specimen was reserved for dissection in order to demonstrate the bond of union.

Dr. MCKELVIE (Cromer) exhibited a fibro-sarcoma of the neck removed post mortem; the tumour had existed about fifteen years; it measured 32 in. by 30 in., and weighed 17½ lb.

AN Exhibition of the International Inventors' Institute will be opened permanently on December 1st, 1882, from 9 A.M. to 5 P.M., free to the public, at Dashwood House New Broad-street, London.

ABSTRACTS OF

INTRODUCTORY LECTURES

Delivered in the Dublin Hospitals and Medical Schools, Session 1882–83.

ROYAL COLLEGE OF SURGEONS' MEDICAL SCHOOL.

MR. JACOB said that was an occasion of much importance to the College, and also of extreme interest to himself personally, for it was the first occasion on which he had assumed, in its full entirety, the mantle of his father. That day they inaugurated the last session of the hundredth year since the foundation of the College; and, moreover, upon that day was to be opened the new school of anatomy attached to the College. They had, a few days since, initiated the first examination held under the new system, which they looked forward to as a regenerative step, and also legislation was impending, of which no one could tell the results, but which was fraught with important results to the College and to surgery in general. In a few words he then sketched the progress which had been made in Irish surgery down to the present time. In 1812 the last State grant was made, £35,000 having in all been contributed, and in 1828 the College was called upon by charter to support itself. A museum and laboratory were established by the College out of its own funds in 1835. In 1844 the apprentice system was reformed, and a supplemental charter was granted transferring the authority and power of the College from the censors and members to Fellows. The income of the College was £7000 a year, and it had a museum containing 7000 preparations, and a library containing 20,000 books, it being only second in the United Kingdom to the Hunterian library and museum in London. The lecturer concluded by referring in terms of praise to the new educational scheme of the College.

MATER MISERICORDIÆ HOSPITAL.

MR. KENNEDY observed that clinical instruction can be but imperfectly understood if not preceded by a short preliminary course in the dissecting-room and in the physiological lecture hall. Anatomy and physiology form the basis of all medical and surgical knowledge, and are inseparable elements in the study of disease. To treat serious diseases, not knowing their history, their pathology, their progress, their dangers to life, and the sequelæ they may entail was in the highest degree culpable. The majority of the students, after completing the prescribed curriculum, would be commissioned by the State, either in military or civil life, to battle with disease, and frequently in quarters isolated, and perhaps often in cases of urgency beyond the reach of the immediate assistance of brother members of the profession. Let them picture to themselves the mental anxiety of a man possessing honesty or humanity who thus, unassisted, is called on to treat a rebellious disease. Each disease, or rather each division of diseases, would require the highest faculties of the mind to be put into constant and vigorous action, and applied unreservedly for a considerable time before they could effectively deal with any of them. A knowledge of fevers could only be acquired in the fever wards of a hospital, and the College of Physicians, showing their full appreciation of the subject, now requires a special certificate in the diseases referred to. The present member for Dublin was the author of a most valuable work on fevers, and to him they also owed the rejection of a Bill that, if once made law, would compel them to become the public informants of domestic affliction, and would destroy the confidential relations that exist between patients and their doctors. They all knew that the natural guardians of families were only too eager to adopt the sanitary suggestions of their medical attendants, and it could be easily understood how strongly they would resist, during a time of grief, the vexatious visits of sanitary inspectors. The medical gentlemen entrusted by the public with the health of the poor could do all that is necessary. Let the arduous labours of these gentlemen be more fully appreciated and more generously rewarded, and let it be incumbent on them to report on the sanitary condition of the poor of their respective districts, and have power to remove any and every cause of contagion. To do more than this would be to increase the danger to the public health by inducing the concealment of contagious disease, and consequently, the neglect of the necessary precautions.

ADELAIDE HOSPITAL.

THE inaugural address was given by Mr. KENDAL FRANKS, who hoped that the new session would be characterised by work, not the spasmodic effort that brought them to the ward to see a curious case, or to the theatre because a capital operation was about to be performed, but the honest work which was the outcome of a steadfast purpose, a determination not to rest satisfied with the dead level of mediocrity, but, by taking advantage of every opportunity which was afforded, to prove themselves fit to occupy a foremost place in the profession which they had chosen. In the wards they would learn what books could not teach, and what they learned there was that which they would value most hereafter. Other work neglected might sometimes be made up for by increased diligence afterwards, but the knowledge gained by daily contact with the sick could never be picked up by a system of cramming at the last moment. The object which they had in view was not merely to pass examinations and to become legally qualified. The profession which they had chosen demanded from them more than that. It required that when they had by law been declared competent to take charge of the lives of their fellow-beings, they should not be found wanting. He did not intend that morning to occupy their time by rehearsing the rapid strides which medicine and surgery had lately made, progress which would mark the nineteenth century as the most eventful in their history; but he would call their attention to one discovery which had done much to revolutionise both branches of their profession, and one which promised to show that, far as we have gone, we are still but children playing on the shore of an unknown and boundless ocean. He alluded to the germ theory. Hostile critics had brought every refinement of scientific research to bear upon it, but it stood the trial, whether of experiment, or the microscope, or the electric beam, and had emerged from the ordeal, no longer a theory but an established fact. In medicine it was now almost universally accepted. Fevers were no longer looked upon as smouldering fires that burnt up the system, or as humours devouring the frame; but were recognised as the result of a living "poison" that had been sown in the system, and had grown and multiplied during the stage known as the stage of incubation until it had poisoned the whole being. The organism which caused diphtheria, a form of what was called micrococcus, had been recognised, and its life history scanned. There was scarcely a malady which had hitherto so baffled the skill of the physician and mocked his every effort as the dreaded disease of hydrophobia. Yet the germ theory had shown the insidious poison which lurked within the system long before it attacked its victim. Experiments were being made to show whether by a process of inoculation after the victim had been bitten he might not be protected against the dreadful outburst of the disease. When this was established the germ theory and its development might claim a glorious triumph. The germ theory had recently been brought to bear on tubercular diseases. By a series of elaborate experiments Koch had at last discovered the source of this terrible scourge to be a micro-organism. He has isolated it, cultivated it, and inoculated with it. Was it too much to expect that as knowledge increases and earnest workers still labour on, some means shall be found for striking down the malady now dragged to light!

RICHMOND HOSPITAL.

MR. THOMSON dwelt on the results of antiseptic surgery. There appeared, he said, at present hardly any part of the body too far removed from the surgeon's knife; but this would not have been possible had not the torch of medicine gone before to lighten the track they were to follow and make their way plain. It was in proportion as they advanced

in the knowledge of medicine that surgeons had been enabled to achieve the brilliant triumphs which made the nineteenth century the greatest in the history of surgery. But while much of this had been due to medical progress, there had been other causes at work not less powerful. The science of sanitation had been gradually operating in the same direction. Pure air, roomy wards, good food, the classification of patients suffering from infectious disorders, intelligent nursing, and all that was meant by cleanliness, had come to be regarded as contributing materially to the success of surgical treatment. Cleanliness in surgery was a term somewhat different in meaning from that ordinarily applied to it by the laity. It did not alone mean palpable concrete dirt, dusty floors, and dirty dressing, but it also signified the dirt which was impalpable—the dirt which only clung about the wards in the shape of viewless contagion, which was not less dirty though hidden from view. Under the old method of treating wounds the mortality was very high, but if they turned to the more recent developments of what was understood as antiseptic surgery, as taught by Lister, they would find a very great change indeed. He showed that in wounds or fluids undergoing putrefaction there were present certain organisms or germs, indefinite in structure, but definite in the outline, to be easily recognised by the aid of a microscope. He proved, as he thought indisputably, that if these germs could be excluded or their vitality destroyed when they made an incision into soft parts, and their access afterwards prevented by means of a dressing so prepared that all air passing through it must have its contained organisms killed, they could keep the wound antiseptic or unpoisoned, and thus reduce it to the state of a subcutaneous one. Mr. Thomson concluded by stating that at no time were there workers so many, so thorough, so industrious, and at no time had the demands upon energy been so urgent.

MEATH HOSPITAL.

AFTER some introductory remarks, Mr. SMYLY said he wished to tell the students what they intended to do for them, and what was expected from them in return. In the name of the Medical Board he promised that they would do all they could to impart what they knew, and in return they expected the students to learn what they could, always bearing in mind there was much in medicine and surgery which could not be explained to the ignorant, and there was much room in every branch of the profession for differences of opinion. Since they parted last summer great changes had taken place, not only in that hospital but in the profession. In the hospital the standing committee had expended a large sum of money in improving the sanitary condition of the house. Not long since every ward was in direct communication with the main drain, and the patients were constantly suffering from erysipelas and other forms of poisoning from bad air; but now all that was altered. They had now a clean and pure house, and bright and well-ventilated wards. The full acceptation of antiseptic surgery was a great step in advance, and they might now hope to see a succession of operations free from the horrors of blood-poisoning. Since they last met, the Royal College of Surgeons had instituted a new mode of examination, and instead of one final examination on most complicated and various subjects, they had in their wisdom substituted sessional examinations. In this way the process of testing the students' knowledge was brought into immediate contact with the process of teaching, and practical courses of lectures had been substituted for theoretical. He hoped this would be more fully carried out, and the yoke of compulsory attendance on lectures removed from the neck of the much-enduring student. The change made by the Royal College of Surgeons consisted in setting down certain definite subjects to be learned during the year, and the result to be tested by examination at the end of each term. It had been the fashion to run down a certain class of teachers—the so-called grinders—but he considered it was not just to do so, for they were the result of a system. General culture and athletic sports occupied very important places in the education of medical men. In adopting medicine as their profession they should always remember that they were walking in the steps of Him who went about doing good, healing the sick.

ST. VINCENT'S HOSPITAL.

DR. QUINLAN said that on that occasion they could hardly do better than consider recent researches upon infective zymotic disease, and the etiology of pulmonary consumption, a scourge to humanity, which up to the present had not been considered to be infective, but which had been proved to be so under certain circumstances. The whole subject was profoundly interesting and important, particularly in relation to the successful efforts which had been made for the attenuation and dilution of zymotic poisons—a plan which opened up a vista of preventive medicine of the most useful kind. The lecturer then described the various stages of zymotic diseases, and the experiments of pathologists which had revealed the true nature of those diseases. He referred to the investigations of Pasteur on the subject of chicken cholera, and the cultivation of the bacillus anthracis—the cause of splenic fever in sheep—and of woolsorters' disease in man. Typhoid fever, he said, was popularly supposed to be due to bad smells and sewer-gas, but it was really due to the germs contained in these; and in reference to this there were two noteworthy points. One was that if sewage be poured through Italian rye-grass, the spongioles destroy all germs, and leave the resulting fluid so far harmless. The other was that, although germs will pass through the finest filters, filtration through spongy iron entirely destroys them. Up to a recent period it was generally believed that pulmonary consumption, although of a hereditary type, was not an infective disease. The matter had been set at rest by the discovery of Villemin that tubercle was inoculable, and this was followed up by Koch, who discovered the tubercle bacillus, cultivated it, and communicated it to animals. It was a consoling fact that tubercular bacilli, unless kept outside the body at a temperature of 100°, at once die, differing, fortunately, in this respect, from those of splenic fever, which sometimes linger for years where animals were kept.

Reviews and Notices of Books.

A Dictionary of Medicine, including General Pathology, General Therapeutics, Hygiene, and the Diseases Peculiar to Women and Children. By Various Writers. Edited by RICHARD QUAIN, M.D., F.R.S. London: Longmans, Green, and Co. 1882.

[FIRST NOTICE.]

THE generic term "dictionary" includes under it a great variety of learned works. Not only is it applied to volumes dealing solely with etymological subjects, but it is employed in medicine to such elaborate writings as are to be found in the "Dictionnaire de Médecine," the "Dictionnaire des Sciences Médicales," and the "Dictionnaire de Médecine et Chirurgie"—the composition of which, although placed in many hands, is the labour of a generation. Strictly such works deserve the title of cyclopædias, a term which is being now extended to works not completed in the alphabetical arrangement—as witness Ziemssen's "Cyclopædia of Medicine" and the American "Encyclopædia of Surgery" now in course of publication. The English works most allied in character to these latter are the System of Medicine and the System of Surgery, edited by Dr. Reynolds and Mr. Holmes respectively. In all these works the idea of co-operation in their composition has been fully carried out—a plan absolutely necessary in the present day, when medicine has extended its limits so widely. One of the first books published on this plan was the well-known "Cyclopædia of Practical Medicine" projected by Dr. A. Tweedie, and edited by him in conjunction with Drs. J. Forbes and Conolly. Some of our readers may remember the issue of this work, which came out in parts in the years 1833 to 1835, and which numbered among its contributors some of the leading physicians of the day. Among them there still remain with us Drs. Tweedie, Bisset Hawkins, and J. C. B. Williams. It was very popular with the profession, the

edition, which was a large one, being completely disposed of, but yet it is a work which is now almost forgotten and seldom referred to, sharing in this the fate of the equally well-known "Cyclopædia of Anatomy and Physiology" edited by Dr. Todd. Such works remain, however, to mark the state of medical knowledge of their time, and they contain much that is of permanent value. The "Cyclopædia of Medicine" opened with an article on the History of Medicine from the pen of Dr. Alison, and closed with a bibliography, which seems meagre nowadays as contrasted with the bibliographies of the modern French dictionaries referred to above.

Turning now to works less extensive and elaborate, and planned more upon the lines of the one under review, it is interesting to find the same conception carried into execution by an Englishman one hundred years ago. There is before us as we write a folio dated London, 1775, which has the following title: "A New Medical Dictionary or General Repository of Physic, containing an Explanation of the Terms and a Description of the various Particulars relating to Anatomy, Physiology, Physic, Surgery, Materia Medica, Pharmacy, &c. &c.; each Article, according to its importance, being considered in every relation to which its usefulness extends in the Healing Art. By B. G. Motherby, M.D." We know nothing of the author of this work beyond what may be gathered from its pages, but we should imagine that this constituted the first real attempt in our language to collate the facts of medical science in the form of a dictionary. Nor is it simply a lexicon of terms, many of the articles being of considerable length. It is interesting to note how many terms then current have fallen into desuetude, and how many remedies then in vogue have been abandoned, whilst the descriptions of disease and the interpretation of symptoms might have been written in the time of Hippocrates. A comparison of this work with the present "New Medical Dictionary" shows strikingly the great advances made in medicine during this century. We have, however, opportunities of comparison, not with a work published a century ago, but with one the appearance of which is separated from us by barely a generation—that, namely, to which the late Dr. Copland devoted the best years of his life. His Dictionary was in many respects unique. Its publication extended over fourteen years (1844 to 1858), whilst its compilation was the labour of thirty years. It may confidently be predicted that no single individual will ever again attempt such a task. No single intellect can deal adequately with the whole science of medicine and its numerous branches, and no amount of study will enable a man now to succeed in such a task to the extent that Copland succeeded in his day. Although an abridged edition of his work was issued so recently as 1866, it, like the Cyclopædia, has now but few readers. It has simply fallen "out of date"—a fate which necessarily comes to all such compilations in process of time, and the sooner when the subjects with which they deal are in a state of transition. For the utility of dictionaries of science, as indeed of all systematic treatises upon subjects which are constantly expanding, is almost limited to the years of their appearance; and the main difficulty in all such works is to ensure that on their publication they shall be abreast of the time. For all that, one cannot but admire the patience and learning of the man who did what Copland did; and we may be permitted to quote the following tribute, which is to be found in the Roll of the Royal College of Physicians. Speaking of the Dictionary and its author, Dr. Munk says:—

"Considered as the production of one man, this work is one of the most extraordinary that has ever appeared for its size, comprehensiveness, accuracy, and learning, and although necessarily inferior in certain respects from its very plan to some works of a like kind, the composition of a large body of writers associated for the purpose, it is superior to these in the general unity of the principles and practice laid down in it, and assuredly excels them all in depth and variety of research. The information amassed in these volumes is literally enormous, and must excite astonishment as the production of one individual; but when it is further considered that the whole of the materials were most carefully selected from all existing sources, most patiently digested, elaborated, and arranged into compact and simple forms easily accessible and readily available, it is not easy to point out in the whole of medical literature any work by a single hand so much calculated to excite admiration of the industry and talents of the author. In every article contained in the volumes the reader cannot fail to be struck with the writer's most extensive learning, which has enabled him to collect knowledge from all authorities, ancient and modern, foreign and domestic, and he will, at the same time, be no less surprised than gratified at the singular power which has arranged the whole so lucidly, and in such systematic order. Thirty years of Dr. Copland's life were devoted to the Dictionary. He laboured on it alone and unassisted. His labours, which he tells us were incessant for many years, were persisted in under circumstances and contingencies which few could have endured. He received no assistance in furtherance of his undertaking, nor, as he adds, with his knowledge of human nature, could he have accepted any."

It is time to turn to the work before us that has just been published by Messrs. Longman. It is a bulky volume of upwards of 1800 pages. It is now many years since it was first projected, and its appearance, long expected as it has been, must be a great source of relief and gratification to those concerned in its production; particularly to the editor's able coadjutors, Drs. F. T. Roberts and Mitchell Bruce, whose names in our opinion should have appeared on the title-page, and upon whose shoulders so much of the labour of its compilation has devolved. The task these gentlemen have had so long in hand was no easy one, for besides the work of collecting, editing, and supervising contributions, no doubt excising redundancies and making needful additions, they have themselves had to contribute largely to the text of the volume. We may assume that they furnish all those articles that require no detailed exposition, all those to which no signature is affixed, whilst they appear as signed contributors to upwards of 120 articles, some of considerable extent and research; as the articles on Anæmia, Morbid Conditions of the Blood and on Rheumatism by Dr. Bruce; on Gout by Dr. Roberts.

In carrying out the plan of the work they have been ably aided by a host of writers, physicians and surgeons, the work being distributed mainly amongst those who have paid special attention to the various subjects dealt with. To give only a few instances. Sir James Paget contributes an article on Pathology and another on Symmetry; Sir W. Jenner writes on Deformities of the Chest; Drs. Bastian, Buzzard, Gowers, Ferrier, Brown-Séquard, and Long Fox on Diseases of the Nervous System; Dr. Broadbent on Fever and some of the Specific Fevers, as well as on Chorea; Dr. Grainger Stewart on Bright's Disease; Drs. Murchison, Legg, and Ward on Diseases of the Liver; Drs. Allchin and Oliver on Diseases of the Stomach and Intestines; Mr. Durham on Intestinal Obstruction; Dr. Lauder Brunton on Pathological Chemistry, including the Urine; Dr. Parkes on Public Health; Mr. Netten Radcliffe on Epidemics, Plague, &c.; Miss Nightingale on Nursing and Nurses; Drs. Green, Powell, Waters, and Symes Thompson on Diseases of the Lungs. Sir Erasmus Wilson takes the main share of Diseases of the Skin, a few articles being contributed by Drs. Tilbury Fox, Liveing, and Sparks; Mr. Simon writes on Contagion; Diseases of the Eye are dealt with by Messrs. Carter, Streatfeild, and Nettleship; of the Ear by Mr. Dalby; Diseases of the Heart by Drs. Bruce, Bristowe, Quain, Shapter, and Wardell; of Aorta and Aneurism by Dr. Hayden and by Mr. Holmes. Dr. H. Weber writes on Hydrotherapeutics; Drs. Stevenson, Poore, and Ferrier on Medico-legal Subjects and Toxicology;

whilst Surgical subjects are dealt with by Messrs. Gascoyen, Callender, Hutchinson, Durham, Holmes, M. Beck, and Godlee; Gynæcology by Drs. Barnes, Playfair, and Herman; Diseases of Children by Dr. Eustace Smith; subjects of General Pathology and Morbid Anatomy by Drs. Cayley, Payne, and Gee, whilst Professor Greenfield contributes articles on Micrococci and Malignant Pustule. In fact this summary, incomplete as it is, and written after a general survey of the work, suffices to inform us that the principles of selection of writers were discriminating and judicious; and much of the success and permanent value of the work will rest on them. It would be obviously impossible to attempt a thorough and critical survey of this work of many hands; but all we propose to do in this and the succeeding notice is to select a few of the more important articles to show our readers what to expect within the pages of this bulky volume. In fulfilment of this intention we may just glance at the work of those contributors who have passed away since they penned the articles which remain as the final mementoes of their labour. It is sad to find that one-tenth of the whole band has thus departed, and it seems but due to them that we should notice their work first before proceeding to that of those who remain.

The subjects of Abdominal Aneurism, Diseases of the Aorta, and Thoracic Aneurism are contributed by Dr. Hayden, and are marked by the thoroughness and care with which his large work on Diseases of the Heart is characterised. Of all methods of treatment of aneurism he gives the preference to that of rest and restricted diet; but he does not omit to state that surgical measures have in some cases proved successful; whilst he mentions such medicinal remedies as iodide of potassium, aconite, and ergotine injections, so much approved by some. Dr. Peacock goes over ground well trodden by him before in the articles on Congenital Misplacements and Malformations of the Heart; he also contributes the article on Influenza. Dr. Murchison in like manner deals with Jaundice. Sir J. R. Cormack treats of Croup, Diphtheria, and Diphtheritic Paralysis; and in the first-named article he clearly shows that membranous croup is not the product of simple acute inflammation, but agrees with French writers, with G. Johnson, Jenner, and others, in regarding it as due to the diphtheritic poison. These articles are well worth reading and pondering; for they exhibit in a small compass the solution of many difficulties. Dr. Lockhart Clarke contributed the articles Infantile Paralysis, Locomotor Ataxy, and Progressive Muscular Atrophy, which are detached, perhaps unwisely, from the series of articles on Diseases of the Spinal Cord, contributed by Dr. Bastian. We do not think sufficient stress has been laid by the lamented *savant* upon the "gastric crises," and the joint affections of ataxy, and could have wished that each of these articles had been more thoroughly revised than appears to have been the case. No better choice as the writer upon Anæsthetics, Artificial Respiration, and Resuscitation could have been made than that of Mr. Clover, whose remarks on these subjects will be read as embodying the fruits of a wide experience. The paper on Causes of Disease, by Dr. Pearson Irvine, is a model of systematic writing, and full of suggestiveness. Dr. Parkes has contributed the article on Public Health, which occupies fifteen of these closely printed pages, and deals with the subject as regards—(1st) cities and towns; (2nd) villages; (3rd) houses; ending with remarks on vital statistics. A few additions have been made to the article by Dr. Buchanan. Dr. Seaton writes on Vaccination, and medical men will do well to study this concise statement of the undoubted efficacy of the measure from so high an authority. This article has been revised by Dr. Collie. Dr. Sparks devotes several pages to the important subject of the Treatment of Disease by Climate, and also contributes papers on certain skin affections, as Lupus, Pemphigus, and Purpura. Dr. Silver gives a clear and accurate description of Addison's Disease, and also a short article upon Suprarenal Capsules. The same writer deals in an excellent manner with Diabetes Mellitus; but here, again, we are reminded of the rapid progress of science, in that we find no mention made of lipæmia and fat-embolism, as a cause of so-called diabetic coma; or indeed of any detailed reference to this latter termination (one of the most frequent in the disease) at all. Dr. Stephen Ward contributes papers on certain diseases of the liver—e.g., Albuminoid Disease, Enlargement, Fatty Disease, Functional Disorders, and Hydatid Disease; Dr. Tilbury Fox writes a few short paragraphs on certain skin affections—e.g., Dysidrosis, Impetigo Contagiosa, Epiphytic Skin Diseases, and Tinea; and Mr. Harry Leach has articles on Quarantine and Scurvy. The names of two surgeons close this list—viz., of Mr. Callender, who contributes the articles on Abscess; and of Mr. Gascoyen, those on Diseases of Cartilage, Condyloma, Fumigation, and Mucous Tubercles.

"POISONING FROM BRAWN."

To the Editor of THE LANCET.

SIR,—In connexion with the notice in an article in your issue of the 11th inst., of a report by me of a series of cases with severe gastro-intestinal disturbance following the consumption of pork, you will perhaps allow me to state that since the report in question was written I have had the opportunity of comparing the micro-organisms therein referred to with drawings of those found by Dr. Klein, in the well-known Welbeck ham-poisoning cases, and engraved in the last Report of the Medical Officer to the Local Government Board; and that in both cases the bacilli appear to be morphologically identical. I am quite aware of the unreliability of conclusions as to the nature of bacilli, drawn from considerations of form alone, but with this reservation, the identity in the two cases goes far to prove the specific nature of the disease. I have placed some mounted microscopic specimens obtained from the brawn which produced the symptoms at the disposal of the Local Government Board, in case it should be thought worth while to obtain the opinion of the original observer of the bacilli in the Welbeck cases as to the identity of the micro-organisms in the two cases. These outbreaks are not only most interesting from a pathological point of view, but of some importance from a medico-legal one. As in the two fatal cases, which occurred in the first series of cases reported by me, the illness was so sudden and short, and the symptoms so much resembled those of irritant poisoning, that a coroner's inquest was held in both cases.

I am, Sir, yours, &c.,

Shrewsbury, Nov. 15th, 1882. W. N. THURSFIELD, M.D.

THE CASE OF DR. ABRATH.—At Westminster, in the Court of Queen's Bench, before Mr. Justice Field and Mr. Justice Stephens, Sir H. Giffard has moved, on behalf of the plaintiff in the case of Dr. Abrath and the North-Eastern Railway Company, for a rule *nisi* for a new trial, on the ground that the verdict which was given for the defendants was against the weight of evidence, and on the ground of misdirection. Their lordships granted the rule asked for. It will be remembered that the action respecting which the rule was last week asked was one brought by Dr. Abrath against the North-Eastern Railway Company to recover damages for alleged malicious prosecution respecting his treatment of a patient, who subsequently recovered damages for injuries sustained in a collision on that railway.

THE THIRLMERE WATER SCHEME.—The award in the suit brought by Countess Ossalinsky, the proprietor of land at Thirlmere, against the Corporation of Manchester, has been announced. The arbitrator finds the Countess entitled to £64,445, and a sum of either £6000 or £4000 additional, contingent on the view that may be taken of a special point in the case.

THE LANCET.

LONDON: SATURDAY, NOVEMBER 18, 1882.

WITH the general purport of Mr. CHURCHILL'S letter on the subject of Children's Diseases being made a Specialty in General Hospitals (published in our present issue) we heartily agree, although we cannot subscribe to all the arguments set forth, some of them appearing to us, in fact, rather irrelevant. Amidst the various contending views as to the proper plan of medical education, it is very necessary to bear in mind the commonplace requirement that a medical school ought to equip a man as far as possible with the necessary knowledge and skill for general practice. On the whole, it is perhaps for the best that the old apprenticeship system is rapidly passing away. But in trying to substitute more scientific methods, it behoves us to endeavour to retain as far as may be its special advantages, amongst which may be reckoned the familiarising the student with the symptoms and treatment of simple everyday complaints. A considerable proportion of the general practitioner's daily work consists in midwifery and the treatment of the ailments of children. With the first we are not at present concerned; but as to the second, it must be confessed that many a distinguished graduate has found himself launched in practice and very much at sea in the simple routine of examining children and prescribing for them.

One point to which Mr. CHURCHILL refers—viz., the testimony of students who have held even for a short period clinical appointments at children's hospitals—is certainly worthy of attention. It would indeed be well for us, in regard to the subject of this letter and many other defects of medical education, if we could take into our councils some of our best young general practitioners. Many men, both old and young, give up in despair the complete physical examination of a child who begins to cry, and thus it happens that often an empyema is allowed to go on unchecked, and cases of severe heart diseases to drift on unsuspected by men who in regard to adults would be incapable of flagrant blundering. The prompt recognition, and, what is more to the point, the reasonable suspicion, of the on-coming acute specific diseases, is one of the lessons which a man has mostly to learn for himself, sometimes at the cost of much chagrin and damage to his early repute. Finally, in all that concerns the bringing up of infants and children the young doctor starts in practice often wofully ignorant. In the lying-in room the baby is consigned to the care of a monthly nurse, who is often obstinate and conceited in proportion to her ignorance. On any question of feeding, or washing, or clothing, the young doctor's advice is seldom asked, and probably with good reason, for he knows little more about an infant than about a puppy, and his solitary notion is often that it should be kept covered up. With regard to older children, the *laissez faire* method of many medical men on the subject of keeping the neck and extremities warm, the use of cold or warm baths, the kind of food and the intervals between meals, and a score of other points in which mothers ought to have guidance, deserves only to be mentioned to be condemned.

It is obvious from these and many other illustrations which might be given that some more complete practical instruction is needed in our medical curriculum with regard to children's diseases. It may also be added that a properly organised children's department is of the greatest possible value, from the teacher's point of view, for demonstrating clinical medicine. With a little tact, which every man ought to acquire, a child may be examined in such a complete way as is scarcely practicable with regard to adult patients. For exercise in the study of what is called the "facies" of disease, children are quite invaluable. Further, in many of their acute ailments we may with a good conscience watch the spontaneous tendency to recovery untrammelled by drugs, and in many of their chronic diseases we have excellent material for testing the beneficial action of therapeutic remedies.

In some of the general hospitals there are already children's wards, and the real question at issue is, How can they be best utilised for teaching purposes, and not merely for a convenient classification of patients? We quite agree with Mr. CHURCHILL'S view, that for teaching purposes the nominal association of midwifery and gynæcology with children's diseases should be severed. The association has long been obsolete in fact, and ought no longer to be maintained on the prospectuses. There is a real danger, then, of the proper teaching of this department being left out in the cold. Ought a special physician and a special surgeon to be devoted to it, or should each member of the senior medical and surgical staff have his allotment of children's beds? For our part we incline to the first plan, subject to rearrangement at definite intervals, so that each officer may in his turn have for a time full control of the medical or surgical children's beds contemporaneously with adult cases, it being understood that during his tenure of office a separate clinique is made of the children's department. It is never to be forgotten that the members of a hospital staff need constant education alike with the students, in order to keep their knowledge and methods broad as well as deep. For this reason, although we strongly approve of special departments, we look with much apprehension on the further increase of specialists at hospitals.

In regard to the out-patient children's practice, which, from the practitioner's point of view, is quite as important as the in-patient work, we hold that there ought to be at every general hospital a separate day at least once a week for children's cases only. This might be taken by one of the assistant-physicians and one of the assistant-surgeons, just as in some of the hospitals the throat cases and skin cases are taken by members of the staff in turn, without relinquishing their general work.

Thus, with a special clinical course on children's diseases, and an out-patient day for children's cases, we believe the general hospitals might fairly meet the needs of the student in this direction. We should deprecate the giving a course of *systematic* lectures on children's diseases, because they ought not to be severed from the course of general medicine, and the multiplication of systematic lectures is a weariness

to both students and teachers. We also fail to see the advantage of a rigid classification of medical and surgical diseases from which Mr. CHURCHILL seems to expect such great things. We think that, in the interests of the patient, and for the furtherance of knowledge, the boundary line should be a very elastic one, and with regard to children more even than with adults, because in them disease is so much more generalised.

THE path of experimental inquiry into the nature of puerperal septicæmia is beset with many difficulties. The disease is, unhappily, not rare, but its occurrence is usually under conditions which do not facilitate experiment, and the results obtained are always incapable of strict verification. The circumstances of the origin of the disease, and its intensely contagious character, leave little doubt of its dependence on an organised virus, and when our investigations into the nature of bacteria are more complete, important additions to our knowledge of the character, forms, and origin of puerperal septicæmia may be looked for. The presence of organisms in the disease has been abundantly demonstrated. WALDEYER found that the peritoneal liquid was simply an emulsion of bacteria, and in animals inoculated with this the same bacteria were found; and HEIBERG, as long ago as 1873, maintained that the system was invaded with bacteria from the uterus in all infectious forms, whether purulent lesions were produced in the body or not. STEURER traced lymphatics filled with bacteria, from a diphtheroid path in the vagina, as far as the diaphragm and the pleura. An important step in the investigation was made by DOLERIS under the direction of PASTEUR. He examined the lochial discharges, and the blood, of puerperal women, and cultivated artificially the organisms which he found. In the former were many species of bacteria, the large bacteria of suppuration, and the bacterium termo, both aerobic forms, needing an oxygenated medium for their existence, and causing no serious danger to patients. They grow in the neighbourhood of the external genital organs, and are rare in the deeper parts. On the vulva were also micrococci, single, double, and in chaplets, some minute, others larger, and probably of a different species, since they are rarely met with in series. The organism which DOLERIS believed to be the real agent of puerperal septicæmia is a special form, anaerobic, developing in media which contain little oxygen, and best in those in which there is none. It is rarely met with at the vulva, but is usually abundant in the deeper genital parts. When the sequelæ of labour are normal, the lochial discharge contains none, or almost none, of these organisms, but they are never absent in the fetid discharge, and in women who have died from puerperal fever they are scattered abundantly in all the tissues, and especially in the lymphatics. He believes that in the rapid form of septicæmia, which kills in three or four days, the blood contains two forms of bacteria, rod-shaped elements in addition to the septic form; but when the disease has a longer course, micrococci are abundant in the blood in different degrees of evolution. When there is suppuration, whatever the position of the pus, whether in veins, joints, or on a serous membrane, pleura or peritoneum, the double micrococcus predominates. The blood, however, does not seem to be a very suitable medium for the growth of microbia. They only grow actively when they are still, or almost still. In the vessels they are only abundant at the seat of a thrombus, but the lymphatic system is that in which their development is most rapid, whence they come into the blood, and pass into the viscera, and the rapidity of their development in some cases appears to be almost inconceivable. Out of the body they lose their virulence after the third culture. To some extent the researches of DOLERIS have been confirmed in Italy by MASINI and FERRARI. They believe that the infective agent is a "vesicular" body, pyriform and punctiform, which is constantly found in the blood of patients suffering from the disease, and is also reproduced in animals, to which the malady is communicated by inoculation. The rods are only met with in cadaveric liquids.

MASINI believes that these organisms are not peculiar to the puerperal forms of septicæmia, but that the same elements occur in other septic processes. This opinion is also held by the distinguished investigator of Lyons, Professor CHAUVEAU, who is conducting an extensive series of experiments regarding puerperal septicæmia, from which we may hope to gain, before long, new and important facts relating to the disease. At present he has only described (to the Société des Sciences Médicales at Lyons) certain preliminary results which he has reached. It was discovered by D'ESPINE in 1873 that rabbits are particularly prone to suffer from the infection of puerperal septicæmia. In this respect they present a striking contrast to guinea-pigs, which resist the infection, although so susceptible to other forms of blood-poisoning. D'ESPINE showed that if pus from a case of puerperal peritonitis is injected into the vagina of a pregnant rabbit, a condition is produced apparently identical with puerperal fever in the human subject. HAUSSMANN, repeating these experiments, has ascertained that the injection causes no symptoms if the period of gestation has not exceeded fifteen days, but after this period abortion is certain, and is followed by septicæmia. If serum from one rabbit thus dead be injected into the gravid uterus of another, the effect is still more rapid; the animal dies in a few hours, without any purulent exudation into the peritoneum. Rabbits have therefore been employed by CHAUVEAU in his experiments. He has succeeded in producing every known degree of puerperal septicæmia, grave and benign, acute, subacute, and chronic. He does not find, when the virus is injected into the tissues, that the condition of the animal has any influence on the result. He has succeeded equally well with males and females, and with young animals and old; in all the symptoms and lesions observed are nearly the same. Nor does he find that the condition of pregnancy materially influences the result, although, towards the end of gestation, or after delivery, the peritoneum seems to inflame rather more rapidly. The result varies a little, however, according to the mode by which the virus is introduced. If the injection is into the peritoneum, a purulent infiltration forms in the skin around the point at which the needle perforated it, and may remain for several months. Death usually occurs in five or six days from the time of the inoculation. Peritonitis, more or less severe, is always present. There is much effusion, containing large numbers of the special micrococcus, sometimes single, sometimes double. The peritonitis was usually associated with double

pleurisy and pericarditis. The cutaneous lymphatics near the point of inoculation are full of pus, and the nearest lymphatic glands are also purulent. If, however, the animal dies very rapidly, in less than twenty-four hours, no peritonitis may be found, although the blood contains the infective micrococci in great abundance. These seem to grow especially in the branches of the portal vein, for blood taken thence possesses extreme virulence. An injection of the virus into the subcutaneous tissue of the abdominal wall gives nearly the same results. Sometimes, however, it is ineffectual; occasionally death is extremely rapid; and, as a rule, wherever the microbia penetrate suppuration occurs. Injection into veins causes no local inflammation. The animals die from the general infection, and the only lesion usually found is congestion or extravasation of blood in the lungs.

A remarkable fact was ascertained in the case of three rabbits, which, although suffering from the effects of the inoculation, ultimately recovered, at least partially. They appeared to have acquired a perfect protection from the disease. It was impossible to produce in them experimental septicæmia. They had undergone, as it were, a septicæmic vaccination. This result naturally led CHAUVEAU to endeavour to obtain a benign virus, which might confer immunity without causing a dangerous illness. He is now making experiments by the method of the attenuation of virus employed by TOUSSAINT, which consists in submitting it to the action of heat. The results of the experiments are not yet sufficiently complete for publication. The fact remains, however, that one attack of puerperal septicæmia protects a rabbit from another. It cannot yet be affirmed that this is true also of the human subject, but CHAUVEAU believes that there are some facts which point in this direction.

THE recently issued report of the Commissioners in Lunacy dealing specially with the statistics of lunacy as recorded on January 1st last, shows that both the number of the registered insane and their ratio to population exhibited a further increase during last year. The number of the insane of all classes had advanced to 74,842, against 36,762 in 1859, the first year embraced by the statistics of the Commissioners. The proportion of total lunatics to population had increased in those twenty-three years from 1·87 per 1000 to 2·83. These figures show that the amount of recorded lunacy, after due allowance for increase of population, was 52 per cent. greater on the 1st of January last than it was twenty-three years previously. As the numbers here dealt with include lunatics of all classes, pauper and private, and those residing with relatives or in workhouses, as well as those detained in public asylums or in licensed houses, no amount of interchange between these classes can of itself account for this steady increase in the number and proportion of registered lunatics. The figures support the conclusion that the recorded increase of lunacy is due to the accumulation of pauper patients in asylums rather than "to an annual production of fresh insanity disproportionate to the yearly increase of the population." It is true that the recent increase has occurred exclusively, and the increase since 1859 has been mainly, among pauper lunatics. It is also true that the proportions of pauper lunatics in asylums, in workhouses, and residing with relatives and others, have shown a marked change during the past twenty-three years. In 1859 18 per cent. of pauper lunatics resided with relatives and others, whereas on 1st January last only 9 per cent. received out-door relief. The proportions in workhouses in 1859 and 1882 were almost identical, but as the large metropolitan asylums for imbeciles at Leavesden, Caterham, and Darenth are legally classed as workhouses, the proportion of the insane in workhouses proper has really declined. The proportion detained in asylums has increased from 57 per cent. in 1859 to 66 per cent. in 1882. The actual result of the influences constantly tending to bring out-door lunatics into workhouses, and to transfer lunatics from workhouses to asylums, has been a net transfer of 9 per cent. of the registered pauper lunatics from out-door residence into asylums. It is obvious, however, that such transfer *per se* will not account for the steady increase in the aggregate amount of these three classes. The accumulation theory requires further definition and elucidation. It is quite possible that the present registration of the insane, by the various authorities responsible for their care or treatment, is more complete than it was twenty-three years ago. This may account for some of the recorded increase. Apart, however, from this source of explanation, the only apparent source of the accumulation by which it is sought to explain the apparent increase of lunacy is the decline in the death-rate of the increasing proportion under treatment in asylums, compared with that which prevails among the decreasing proportion in workhouses, and residing with relatives and others. Here, unfortunately, the statistics of the Lunacy Commissioners fail to supply the necessary facts for estimating the results of accumulation arising from this cause. No figures are given showing the death-rate among the insane, either in workhouses or residing with relatives and others. The Local Government Board are, we presume, primarily responsible for this important omission. The figures are, however, absolutely necessary for testing the real value of the accumulation theory as an explanation of the constant increase in the proportion of total lunacy. We fully believe that accumulation is taking place in our asylums, and that it is largely due to the cause above-mentioned, but further statistics are necessary to establish the theory, as well as the extent of its operation. In connexion with this subject we published a few years since some elaborate statistics of mortality in the Metropolitan Asylums for Imbeciles, showing that the death-rate in those institutions, which averaged 140 per 1000 in the first three years of their existence, declined to 82 in the three years 1877–79. These figures afford ground for concluding that much accumulation of so-called lunacy would have been prevented if the metropolitan imbeciles had been left in the imbecile wards of the metropolitan workhouses. We want, however, further facts in this direction.

IT is not to be doubted that the Committee of the Royal College of Physicians, to which the consideration of Dr. ACLAND'S resolutions has been referred, will realise the great responsibility which will be incurred by the College if it seems to take a step which may be misconstrued. We do not doubt at all that, with the known views and dispositions of the two English Royal Colleges, it would be very easy to construct a Board of Examiners that would

amply satisfy public and professional opinion, and the creation of which would be a great and long-deferred boon to unfortunate students who have two boards to pass where they should have only one. As we said last week, such a board might go far to solve the vexed question of a Conjoint Board "so far as England is concerned." But this is saying very little indeed. It is not an English problem that calls for solution; it is a British one. It is that there are irrepressible rumours of the inequality of examinations that ought to be above all suspicion of inequality; and that the members of the profession holding diplomas from one part of the country are told by leading members of the Medical Council, by the Medical Council itself, and by the Royal Commissioners, that the examinations they have passed are "too elementary," and that the diplomas they possess afford no guarantee of a competent knowledge of medicine, surgery, and midwifery. What cure for these complaints and evils will there be in the creation of a good board merely in one division of the kingdom? Absolutely none; but only a greater probability that students will be driven to boards in other divisions where, it may be thought, things are conducted more easily and cheaply.

The resolutions of the Royal College of Physicians set great store on the authority of the Royal Commission. Yet we have great misgivings as to whether the College, in entertaining these resolutions, is acting loyally either to the Royal Commission or the Government. Surely it would be a higher course in the English Royal Colleges, which have throughout these controversies displayed more public spirit than their sister Colleges, to go to the Government and say that they are fully prepared to subordinate their interests to the main recommendations of the Report, provided that the corporations in other parts of the kingdom do the same. It may be said that a conjunction of the two English Colleges will in no way place them in a worse position if the Government should introduce a Bill. Perhaps not. But what is wanted is compulsory legislation without delay. The energy of the Colleges should be directed to this end, and to the termination of this intolerable state of suspense and mutual disparagement. The two Royal Colleges of England owe it to themselves not to be led off the track of thorough reform by Dr. ACLAND, who has always been timid and temporising in this matter. It will be a great disappointment to the profession if the College of Physicians, with Sir WILLIAM JENNER at its head, who has been more thorough and more in sympathy with the profession than any of his colleagues, takes a step which will be misconstrued, if it is not initiated, by the enemies of reform, just at the moment when it is commended by a Royal Commission.

THE following standing rule of the Royal College of Surgeons has just come into operation, and will no doubt stimulate students to be better prepared for the membership of the College:—"When a candidate referred on the Pass Examination for the diploma of member shall have exhibited such extreme ignorance in the examination as, in the opinion of the Court of Examiners, to render it desirable that he should be referred for a longer period than six months, he shall, before his admission to re-examination, produce a certificate of having attended the surgical practice and clinical lectures on surgery of a recognised hospital for a further period of *nine* or *twelve* months, as the Court shall determine."

Annotations.

"Ne quid nimis."

ROYAL UNIVERSITY OF IRELAND.

AT a recent meeting of the Senate the following alterations as to the courses for medical examinations were adopted:—1. As to certificates of acquaintance with mental diseases, candidates will not be required to produce certificates of having attended courses of lectures on these diseases; but every candidate for the M.B. degree will be required henceforth to produce a certificate of attendance for three months in a recognised lunatic asylum, where clinical instruction is given. 2. After the year 1883, all candidates for the degree of M.B. will be required to exhibit proficiency in the use of the ophthalmoscope and laryngoscope. 3. After the year 1883, all candidates for the degree of M.Ch. will be required to present a certificate of having attended a three months' course of lectures on operative surgery. 4. After the year 1883, all candidates for the degree of M.Ch. will be required to pass a special written examination. In 1884, a studentship will be awarded for proficiency in experimental physics and chemistry, and the following year for proficiency in biology (including physiology, zoology, and botany), and in geology (including mineralogy and physical geography).

NYCTALOPIA AND HEMERALOPIA.

TWO interesting etymological papers appear in the tenth volume of the Royal London Ophthalmic Hospital Reports, from the pens of Dr. Greenhill and Mr. Tweedy, with the object of fixing the signification of the terms nyctalopia and hemeralopia. These terms were in use at a very early period of medical history, and one of them, "nyctalopia," was used, and in one passage defined, by Hippocrates himself. It is natural, then, to inquire what his definition was, and it appears that in all the older editions of his works the passage runs, "Οἱ δὲ τῆς νυκτὸς ὁρῶντες, οὓς δὴ νυκτάλωπας καλέομεν, κ.τ.λ." ("Those who see at night, whom we call nyctalopes.") But in 1864 Ermerins, in his splendid edition of Hippocrates' works, considered the passage in question to be corrupt, and that the word οὐχ, "not," which of course entirely alters the sense, had been accidentally omitted. Dr. Greenhill supports Ermerins' emendation, on the grounds, first, that one of the MSS. of the Hippocratic writings in the great library at Paris had originally the word οὐχ before ὁρῶντες, which, though erased, is still plainly visible; and secondly, Celsus, in translating this passage of the "Prorrhetica," gave the signification night-blindness to it. Galen again, in the latter part of the second century, interpreted nyctalopia, as used in the Hippocratic collection, to signify night-blindness, and therefore clearly held the true reading to be οὐχ ὁρῶντες, though in works deemed on other grounds of doubtful authenticity he is made to use the word in the sense of day-blindness. Galen also makes a comment upon the sentence which shows that he regarded the word as compounded of νύξ, "night"; ἀλαός, "blind"; and ὤψ, "eye." After Galen, Oribasius, Aëtius, and Paulus Ægineta, to whom other names of great weight might be added, employed the term nyctalopia to signify night-blindness. But Mr. Tweedy supplies additional evidence in support of the emendation of the ordinary text of Hippocrates, drawn from a consideration of the medical aspect of the cases to which the term is applied. Thus he points out that the affection was described by Hippocrates himself as occurring especially in children and young adults; in those who have dark eyes and small pupils, whilst it is exceptional in married women and in healthy maidens; that it was customary for eruptions to appear about the ears on the seventh or eighth day; that the formation of abscesses

and spontaneous diarrhœa are to be regarded as favourable prognostics; that the treatment should consist of bleeding, cupping, purging, and the ingestion of the liver of the ox steeped in honey; and lastly, which is of great importance, that the disease may be complicated with swelling of the gums, bleeding from the nose, ulcers on the legs, and enlarged spleen—in a word, with the symptoms of scurvy, which is just the condition in which night-blindness is apt to occur. Mr. Tweedy has further drawn up a table from which we learn that, except in the disputed passage of Hippocrates quoted above, and in the doubtful Galenic work, no author of repute used the term "nyctalopia" to denote *day*-blindness before the seventeenth century. At this period, for some unexplained reason, the meaning of the term became uncertain, and with the eighteenth century the term hemeralopia came into frequent use with the ancient signification attached to it of nyctalopia, "night-blindness," whilst the sense of nyctalopia became reversed and came to signify "night-sight." After the eighteenth century, Mr. Tweedy remarks, only a few names can be found to support the original meaning. To those he mentions, however, several might be added, especially John Quincy, who in the tenth edition of his Lexicon Physico-Medicum, published in 1787, gives the derivation of the term nyctalops—from νύξ, night, and ὄψ, an eye—night-blindness. "Some have said it is those who see by night, others say it is those who cannot see by night; however, it is by the moderns generally understood to signify that disorder in which, as the night approaches, the patient loses his sight and remains blind until the morning, at which time the sight returns and continues all the day." And again, Parr, in his London Medical Dictionary, gives nyctalopia (from νύξ, night, and ὄψ, an eye): "Night-blindness; Imbecillitas oculorum. It is now understood to signify that disorder in which as the night approaches the patient loses his sight and remains blind until the morning." Parr adds, that in Vogel's System and in Linnæus' and Vogel's Genera the meaning of the terms hemeralopia and nyctalopia were reversed. It is, of course, greatly to be desired that the signification of medical terms should be fixed and invariable; and it is therefore to be hoped that all those who in future use the term Nyctalopia will employ it in the sense which Dr. Greenhill and Mr. Tweedy have with so much industry and acumen shown to be the original and correct sense, and regard it as indicating night-blindness.

CASUALTY COINCIDENCES.

IT has been often noticed by hospital surgeons that severe, curious, or out-of-the-way accidents seem to occur in groups, and that when one patient is admitted with an unusual injury, a second of a somewhat similar character may be expected shortly to follow. This "fortuitous coincidence" has been illustrated lately at the Middlesex Hospital. About five weeks ago, within ten days, five patients were brought into the hospital who had fallen from houses—three from windows and two from stable-lofts. During the past week two accidents of a similar and unusual kind were admitted within twenty-four hours. On Wednesday evening a lad, aged fourteen, had his foot torn off by machinery; and on the following morning before ten another lad, aged nineteen, was taken to the hospital with his hand lacerated also by machinery in a similar manner. The following is a brief account of the cases: At about seven o'clock in the evening the first boy, aged fourteen, was getting on the stool on which he stood for the purpose of lifting off the papers from the printing-press, when he slipped and was caught by his left foot in the fly-wheel which was in motion, and was carried round by it three times before the machine could be stopped. When admitted it was found that his foot, with the boot, was wrenched from his leg, and was hanging only by the tendons. The tibia, which was bare of integument for about four inches, was unbroken, but standing away from the foot; the fibula was broken off just above the malleolus. On the following morning another accident very similar to the preceding one was admitted. The lad, aged nineteen, had been cleaning the engine whilst in motion, and was walking away when his foot slipped on some grease, and his right hand slid down the back of the cylinder and was caught at the bottom by the crank, which seized the thumb and tore the ball of it from the palm of the hand, breaking its metacarpal bone and wrenching it away from its articulation with the trapezium. The wrist-joint was laid open, and the integument detached from the palm of the hand. These cases came under the care of Mr. Lawson, who amputated in the one case the leg and in the other the hand. Both cases are doing well.

CAVENDISH COLLEGE.

CAVENDISH COLLEGE, named after the Duke of Devonshire, the present Chancellor of the University, who takes great interest in it, and has contributed in various ways to it, was founded in Cambridge, as many of our readers are aware, for the purpose of enabling students to enter the University at a younger age, and to pass through it at less expense than is usually done. It purposed to supply an evident want, for the expenses of a university course prevented many from entering upon it who greatly aspired to it; and the success of the College has justified its institution. A handsome building has been erected, in which the students live under the control and direction of a principal or warden, and they attend the university courses, present themselves for examinations, degrees, &c. The expenses are reduced to a minimum, not amounting to more than £80 or £85, which includes university fees and other educational expenses, as well as board and lodging during the term time, and also during the long vacation. Thus far, however, it appears to have had no distinct university recognition; the students were ranked as non-collegiate students, and were under the superintendence of the board for those students. Now this has been altered by a grace of the Senate, passed on November 9th, for the recognition of Cavendish College as a public hostel of the University. By this the College has been placed upon an independent footing, as an integral factor in the University, and the students are now upon an equality with the students of other colleges, and will no longer be upon the non-collegiate list. We heartily congratulate the College upon this acquisition of an independent position, and wish it the additional success that seems likely to accrue from it. We have often expressed the desire that increased facilities should be given for obtaining the degrees of the old universities. Not that we would lower the estimation in which they are deservedly held. The maintenance of that estimation must depend upon the culture required to obtain them and the tone and character of those who possess them. We are well aware that higher education implies longer time, and therefore greater cost. But this renders it more desirable that the cost should be reduced to the minimum, so as to increase to the utmost the numbers brought within the beneficial influence of the university course. Let a good standard of education be maintained, and let those who aspire to it come and drink with as little money and at as little price as possible. The increasing number of those intended for the medical profession who are resorting to the University proves the desire in the profession for university education and the status it gives, and is a good indication both for the University and the profession. These students are not generally persons of affluence, and such an institution as Cavendish College cannot but commend itself to them.

SYNTHESIS OF URIC ACID.

IT is stated that Dr. Horbatschevsky, of the Vienna Chemical Institute, has succeeded in forming uric acid synthetically. As is well known, all attempts to produce this substance artificially have hitherto failed, and considerable doubt has existed with regard to its exact constitution, though it is generally represented as consisting of one radical of tartaric acid and two of urea. From the fact that uric acid under powerful oxidation splits up into molecules of urea, it has been assumed that this body is one of the substances through which every particle of albumen passes before it is thrown out of the body, and on this assumption it has been taught that when oxidation is imperfectly performed there is an accumulation of insoluble uric acid in the blood, which replaces some portion of the urea which ought to be formed. It is upon this view that the doctrine of *lithæmia* has been founded. On the other hand, there are a few who believe that uric acid in the human body in health, and even in disease, is formed in only very minute quantities, and that its pathological importance is to be referred rather to its insolubility than to its excessive production in the system. They hold that though uric acid contains residues of urea, it is not necessarily an antecedent of the latter, and that it is more probable they both start from a body containing at least some of its nitrogen in the form of cyanogen, and that the final cause of divergence lies in the fact that urea is the form best adapted to a fluid, as in the case of mammalia, and uric acid to a solid, excrement, such as is met with in birds and reptiles. This view is strengthened by the increasing evidence we have that the chief antecedents of the urea in the blood are partly the kreatine, formed in muscle and elsewhere, and partly the leucin and other like bodies formed in the alimentary canal. A writer, who has recently investigated the question from its clinical aspects, remarks that if this view be accepted, uric acid will be regarded as a consequence, and not a cause, of the manifold disorders to which it has been said to give rise; that when it is deposited, the fact of the occurrence of the deposit will have to be referred to the insolubility of the minute quantity that exists in human blood, rather than to any excessive production in the system, and that attention will then be primarily directed to the discovery of the circumstances which lead to the deposit of this insoluble substance, rather than to vague generalisations concerning its over-production from hepatic derangement or gouty proclivities.

ELECTRO-PYROTECHNY.

IT is asserted, we know not whether "on good authority," that certain theatrical managers contemplate the use of the electric light as a means of producing the semblance of sparkling gems, displayed on the moving persons of fairies, demons, and sprites, in spectacular burlesques or pantomimes to be presented at Christmas-tide. If this be the fact the attention of the Secretary of State should be at once directed to the matter. It is not a question for the Lord Chamberlain, but for the Home Secretary; and we shall hope to hear that an interrogatory has been addressed to Sir William Harcourt in the House of Commons on an early day, bringing the matter under his official cognisance. Great precautions will be necessary to ensure safety. It is not, as everybody who has any practical acquaintance with electric apparatus should be aware, necessary to run the exceptional risk of carrying an accumulator about the person. A very small portable battery, scarcely larger than that contained in the staff now employed for lighting lamps and candles in many private dwellings, would suffice for the purpose of producing the appearance of a brilliant gem. The statement which has been made in one at least of the daily newspapers is, therefore, exaggerated. It cannot, however, be disguised that there *is* a danger to be dreaded. The artistic designers of stage spectacles vie with each other in the magnificence of their conceptions, and they are little likely to be content with small effects. If anything of the sort indicated is produced it will be some exceptionally magnificent display of electro-pyrotechny. We shall have thunderbolts hurled from the hand of Jupiter dancing a breakdown, or flashes of lightning played by contortionists and coryphées; with possibly an electric demon whose diabolic splendour will be dependent on the continuity of some chain which he drags about the stage, and which may "accidentally" entangle some one in the electric circuit. The electric light is at present a pretty toy, and it is probably one that cannot be kept out of the hands of scenic artists, but it should not be allowed to be used without precautions of perfect sufficiency to prevent the accidental discharge of the destructive current in wrong courses. Enough has already been accomplished in the way of killing persons by electricity when that agent has been clumsily or ignorantly employed for legitimate business purposes. It is needless to run the risk of striking the performers in a Christmas pantomime dead by a reckless indulgence in electro-pyrotechny.

PUERPERAL FEVER AND THE PRACTICE OF MIDWIFERY.

MR. ROWBOTTOM, the borough coroner for Wigan, has just held an inquest on a woman who died from puerperal fever, which had in all probability been conveyed to her by a midwife who attended her in her confinement. The jury were anxious to censure this woman, and also expressed an opinion that it is desirable that midwives should be certificated as competent to follow their calling before being allowed to practise. Since the first week in September from ten to twelve deaths have been registered in the town of Wigan from puerperal diseases, and others have occurred. Eight of these cases have been attended in confinement by this midwife, and it was owing to this fact that Mr. Barnish, the medical officer of health, made known these cases to the coroner. The coroner deemed it his duty to hold an inquiry on the next case that occurred in the practice of this midwife. It was shown, however, at the inquest, that she had ceased to attend any more cases after being warned. Mr. Rowbottom has undoubtedly done good service in calling public attention to this matter by holding an inquest, and this will also have an effect in preventing other women who follow the same calling from spreading such a fatal disease. The midwife in this particular instance could not believe it possible for her to carry infection to those she was attending, although every case she went to succumbed, thus showing how necessary it is that some proof of competency should be shown by this class of persons, who are largely employed by the poor in our manufacturing towns.

BREACH OF THE MEDICAL ACTS IN LIVERPOOL.

LEWIS GEORGE WYNNE has been fined £5 for unlawfully using the title of M.D. He has been committed to take his trial for having signed a vaccination certificate, using the name of Dr. Kennedy. He said it was with Dr. Kennedy's consent. Dr. Kennedy is a graduate of the University of Edinburgh, and said the defendant was a very good vaccinator, and that he (Dr. Kennedy) had never hesitated to sign a certificate of a vaccination that had been done by him. He denied that he had ever authorised him to sign his name. We cannot but regard the practice of signing vaccination certificates for other persons as a very improper one. It is clearly contemplated that a gentleman shall only certify where he himself has vaccinated. To certify cases vaccinated by an unqualified person is to defeat the law.

RECOVERY OF CHARGES FOR SERVICES RENDERED BY AN UNQUALIFIED ASSISTANT.

WE publish in another column a legal decision delivered by Mr. Commissioner Kerr, in reference to a subject of great importance to practitioners—namely, their right to charge, or their power to recover, for services rendered to patients by their unqualified assistants. Should this decision of Commissioner Kerr's be confirmed, it will entirely invalidate medical charges either in private or public practice for services rendered by an unqualified assistant. Even as it is, it is sufficiently disturbing to practitioners who have employed unqualified assistants in a way that has hitherto been sanctioned by the profession—namely, in strict subordination to and co-operation with themselves. Commissioner Kerr observes, "The law says that a doctor cannot recover for medical advice given by his assistant." The unqualified assistant told his honour that the patient preferred to be attended by him. But this only intensified the dissatisfaction of the judge, who said, "That only makes the case worse. I may tell you that you are liable to be indicted, and perhaps you will be so one of these days if anything goes wrong." Judgment was given for the defendant. This decision seems to us in advance of anything yet delivered by judges; though logically it may be inferred that as a medical man must be registered to recover charges for his own attendance, so his assistant must also be registered for recovering charges for services rendered by him. But if we mistake not, there are decisions to the contrary of this. Mr. Glenn in his "Manual of the Laws affecting Medical Men," says, p. 193, "A registered practitioner may maintain an action for professional services rendered by an unregistered assistant, and it would seem that where such services are performed by a firm of two persons, one of whom is registered and the other not, the firm may recover on a joint claim." (See Blogg *v.* Pinker's Ry. and M., N.P. 125.) But this and such decisions were prior to the passing of the Medical Act.

CROUP AND DIPHTHERIA.

PROFESSOR E. HENOCH draws attention, by means of a paper published in the *Berliner Klinische Wochenschrift* of Oct. 2nd last, to the difference which, according to his view, exists between the non-specific croupous angina and true diphtheria, diseases which he believes are not sufficiently discriminated. At the outset he expresses his conviction that there is such a thing as a non-specific croupous pharyngitis, and he regards croup as only being identical with diphtheria, whether in its pathological or other relations, in the same way as a small-pox pustule resembles a pustule produced by vaccinia or as the result of the inunction of tartar emetic. Any so-called croup having a specific origin is, he alleges, diphtheritic. With a view to the better distinction of the two diseases he points out that the non-specific croupous pharyngitis is generally characterised by the suddenness of the febrile invasion, whereas in diphtheria the fever is at the onset only slight and insidious in its progress. A much less constant difference lies in the fact that in the non-specific disease a single tonsil is, in the first instance, much more frequently affected than is the case in diphtheria. So also the extension of the membrane to the palate, and especially to the back of the pharynx, must always be regarded as highly indicative of true diphtheria, and the implication of the mucous membrane of the nasal passages is a certain sign of that specific disease. On the other hand, certain indications to which importance is at times attached are, according to Professor Henoch, comparatively unimportant. Thus, albuminuria, generally regarded as a symptom of diphtheria, is often absent in undoubted cases of that disease, and micrococci, when discovered by the aid of the microscope, are of little value for the purposes of diagnosis, not only because they are found everywhere in the mucous membrane about the pharynx, but because no definite microphyte has been shown to be associated with diphtheria. The difficulty attaching to a correct diagnosis should, however, in the Professor's opinion, never interfere with measures of prevention, and hence he urges that where there is the least doubt as to which disease is being dealt with, isolation should be rigidly enforced. Professor Henoch proceeds to point out that the disease known as scarlatinal diphtheritis is essentially distinct from specific diphtheria, and, according to his experience, the failure to distinguish between them is largely due to the fact that scarlatina and diphtheria are often treated in the same wards, and that patients, whilst convalescing from the one, contract the other. Cases are cited to show how patients recovering from scarlet fever associated with marked throat lesions have contracted true diphtheria, and it is further shown that in patients who have undergone the operation of tracheotomy for diphtheritic croup, scarlatina with throat ulceration has subsequently intervened, the reception of the scarlet fever being greatly facilitated both in such an instance and in the case of convalescence after extensive diphtheritic throat lesions by the fact of the exposure of a wounded surface to that scarlatina poison. In such instances it is, however, suggested that a correct diagnosis will be aided if it be borne in mind that the throat ulcerations due to scarlatina follow on, and do not precede, the diphtheritic symptoms. In some of these instances the characteristic sequelæ of the two diseases have, in the later stage, been found mingling together, in a manner which might easily be regarded as affording some proof of the unity of the disease, had it not been for the clear distinction between them which was possible at an earlier period of the patient's illness.

SMALL-POX IN SOUTH AFRICA.

THE presence of small-pox in Cape Town and its vicinity is still exciting great alarm in the minds of the inhabitants of the infected districts, and very energetic efforts are being made to cope with the scourge. The *Port Elizabeth Telegraph*, of the 14th ult., contains a long report of a meeting of the citizens of Uitenhage, presided over by the mayor, at which twelve proposals were agreed to for the protection of the community against the spread of the disease. These proposals included provision for the thorough supervision of houses, the proper supply of lymph, periodical and punctual returns of cases of attack, the regulation of burial of victims to the malady, increase in the public medical staff, and the swearing in of a sufficient number of Europeans and trustworthy natives as special constables to aid in carrying out the law. At Cape Town the deaths from small-pox in the month of September numbered 435. The proportion of vaccinated to unvaccinated in the fatal cases appears not to have been ascertained, but this is a matter which should not be overlooked.

THE GENERAL INFIRMARY AT LEEDS.

THE authorities of the Leeds Infirmary have decided on increasing the surgical staff of the hospital by the appointment of two assistant-surgeons, on whom will devolve the duty of seeing the surgical out-patients who attend at the institution. We are surprised that a reform which has been required for so many years has been so long delayed, and we would further point out that assistant-physicians are also demanded for the full working of the hospital The number of medical out-patients is even greater than the surgical, whilst the medical staff is less numerous; and so the authorities must, willingly or unwillingly soon come to this conclusion. The candidates for the

new appointments include Mr. McGill, who is especially well known as an anatomist and a teacher. He is not only versed in the details of aseptic surgery, but by the introduction of salicylic silk has placed a valuable dressing at the disposal of surgeons who adopt this method. His treatment of an aneurism of the left subclavian artery by temporary compression applied directly to the first part of the vessel attracted much attention at the Medico-Chirurgical Society some six or seven years ago, and marked him out at once as an original thinker as well as a bold operator.

ACADEMY OF MEDICINE IN IRELAND.

THE scheme for the amalgamation of the several medical Societies of Dublin has been finally adopted, but will not come into operation until the officers and council are elected, which will take place on the 18th inst. The Academy will commence its meetings this session, and will be composed of fellows, members, and student associates; all the members of the present Societies—the Medical, Surgical, Pathological, and Obstetrical—may join as fellows or members without entrance fee, on payment of the subscription for the current year: two guineas and one guinea respectively. There will be four sections—Medical, Surgical, Obstetrical, and Pathological—and two sub-sections—Anatomy and Physiology, and State Medicine. The sections will be each managed by a president and a council, and the sub-sections by a chairman and a committee. The Academy will also have a president, who will hold office for three years. A meeting of the promoters, consequent on a requisition received by the President of the College of Surgeons, was held last Monday, to consider the question of voting, when a discussion took place on some points of detail which were come to at a previous meeting. An objection was made as to the Surgical section not being sufficiently represented, they having been reduced to ten instead of twenty-one, as in the present Surgical Society. Mr. McDonnell proposed a resolution to the effect that it was inexpedient to make any change in the rules adopted, which was seconded by Dr. Moore, President of the College of Physicians, and finally adopted by a large majority.

ACTION OF OXYGENATED WATER ON THE ANIMAL ORGANISM.

COLASANTI and CAPRANICA (*Arch. Italiennes de Biologie*, vol. ii.) have made a series of experiments on dogs with oxygenated water, H_2O_2, and find that when made to absorb it they experience toxic effects and rapidly die. Toxic doses vary with the size of the animal, 25 c.c. proving fatal to a dog weighing three kilos, or six and a half pounds, and 75 c.c. to a dog weighing thirteen kilos. The intoxication manifests itself on all the functions of the body, but especially on those of the spinal cord. The excito-motor power of this centre is over-excited, the manifestations of which are convulsive phenomena, tetanus, and locomotor ataxy. The physico-chemical phenomena of the tissues are also profoundly modified, for it produces strong glycosuria before death. The disorders of the economy result from the decomposition of the oxygenated water in contact with the living tissues. The phenomena consecutive upon intoxication with oxygenated water are identical with those observed by Paul Bert following the action of compressed oxygen.

BANQUET TO THE MEDICAL OFFICERS OF THE EGYPTIAN EXPEDITION.

PREPARATIONS for this banquet, to be held on Tuesday next, at Willis's Rooms, are in a state of forwardness. Sir Garnet Wolseley has accepted the invitation to be present, and other distinguished guests are expected.

ARBITRARY REDUCTION OF SALARIES OF UNION OFFICERS IN BALLYMENA.

THE guardians of the Ballymena Union have determined on serious, and almost wholesale, reduction of the salaries of the medical officers of the Union. One happy gentleman, Dr. Ross, is excepted, on the ground that he was exceedingly attentive to his duties, and had held his appointment for a long time. The midwife, too, escapes. But the *Ballymena Observer* gives the following account of the fate of others:—"The salaries of Dr. Dysart, Portglenone; Dr. M'Kay, Clough; Dr. Chestnut, Ahoghill; Dr. Hays, Glenwherry; Dr. Courtenay, Galgorm; Dr. Picken, Toome; and Dr. Dickson, Broughshane, were reduced from £90 to £67 10*s.* each, while the salary of Dr. Gilmore (apothecary, Ballymena Dispensary) was reduced from £52 to £42. The matter with reference to the salaries of the relieving officers was postponed in the meantime." A proper motion to take the opinion of the Local Government Board on the question was rejected by a majority of two, and with some very discreditable and disrespectful allusions to the Local Government Board. We trust, nevertheless, that the minority will bring this matter under the notice of the Local Government Board, and secure justice to a class of men who cannot be injured without hardship to the poor whom they serve, and serve well.

"FLOGGING IN BOARD SCHOOLS."

WE have not a word to say against the use of the "birch" applied to the proper part of the person, and moderately and wisely used as a punishment for the graver offences of children, such as lying, dishonesty, wilful disobedience, and the like offences; but caning children on the hands and for trivial acts of wrong-doing is not to be tolerated; and we doubt very much whether the masters of Board schools should be entrusted with the power of chastising the poor little urchins who are placed in their power. However that may be, it is a scandal that schools under the *ægis* of the Board should be allowed to be so conducted that the fear of "flogging" keeps children away from them. The idea of two teachers holding a little boy down on a desk while the master canes him, as is the alleged manner of procedure at some of these schools, is irritating, and stirs the mind with a vehement wish to have the opportunity of serving the officials—who, dressed in a little brief authority, so abuse it—as they serve their pupils.

THE WAYNFLETE PROFESSORSHIP OF PHYSIOLOGY.

A STATEMENT appeared last week in a contemporary to the effect that Dr. Burdon Sanderson had been induced to become an opponent of Dr. Gamgee in his candidature for the new Chair of Physiology. We have reason to believe that this is a mistake. Dr. Burdon Sanderson has, no doubt, been spoken of as a possible occupant of the chair, but he has made no application to the electors, and we understand that he has received no suggestion from any of them that he should become a candidate.

HEALTH OF VENTNOR.

A DECIDED contradiction is given to the statement that typhoid is prevalent in Ventnor. According to Dr. Woodford, the medical officer of health, there were only three cases of typhoid in 1881, and there have been only three under treatment this year. Of these, Dr. Woodford says, two were imported. All recovered. Five of the chief practitioners in Ventnor, in a letter dated November 2nd, aver that there is not a single case of typhoid under treatment at the present time in the town.

THE NORWICH VACCINATION INQUIRY.

AT the moment of going to press, we have received a copy of the official reports on the Norwich Vaccination Inquiry. It is impossible in this issue to do more than make brief reference to them. But a hasty glance at the reports is sufficient to cause a feeling of surprise in the mind of the reader. There is a complete absence of that thoroughness of investigation necessary for the solution of the problem which it was the inspector's duty to study. Conclusions have been come to for which there would probably be little foundation if the facts had been duly investigated and considered. It is this circumstance which we suppose has led to the publication of a memorandum addressed by Dr. Buchanan, F.R.S., the Medical Officer, to the President of the Local Government Board, showing that the conclusions which have been arrived at by the inspectors are certainly not borne out by the evidence, and that many important considerations which might have led to an elucidation of the cause of erysipelas have been overlooked.

BOTANY AND COMPARATIVE ANATOMY AT CAMBRIDGE.

THE Board of Medical Studies at Cambridge has just presented to the Vice-Chancellor its report, recommending that attendance on lectures on Botany and Comparative Anatomy be no longer compulsory on medical students, though the examination in those subjects will be continued. The recommendations have not yet actually been adopted by the University. It is argued that if attendance on lectures on Botany and Comparative Anatomy be no longer enforced, these subjects will then, in this respect, be placed upon the same footing as Physics. There is, at present, no requirement compelling medical students to attend a course of lectures on Physics; and this arrangement is, it is stated, found to work satisfactorily.

CONCEALMENT OF BIRTH.

THE case of Charlotte England, on which we lately commented, terminated curiously. She was found guilty, but strongly recommended to mercy. The child, it may be remembered, was found between two beds in a piece of calico, and the surgeon, Mr. Ford, believed it had been born alive. She had previously borne a good character, and it was intimated that if she was allowed her freedom the father of the child would marry her. This prevailed with judge and jury, and she was dismissed, bound over in her own recognisances in £20 to good conduct. Decisions of this sort are very kind to mothers under such circumstances, but very hard upon babies, and certainly do not tend to check the practice of infanticide.

SIR THOMAS WATSON, BART.

THE state of this revered physician has during the past week been one of increasing weakness, and, we regret to state, of increased suffering. Indeed, so distressing is his present condition that those to whom the loss of so great and good a man will cause the most acute pain, can but hope and pray for his speedy release.

MEDICAL ADVERTISING IN THE LAY PRESS.

THE Royal College of Physicians of Ireland is to be congratulated on the decided tone of its resolution condemning the practice of advertising medical works in the lay press. It will be remembered that the London College a few months since passed a resolution which limited censure to the practice of "extensively" advertising, whilst the question of advertising in the lay press was left altogether to the conscience of the Fellows. The Irish College has, however, spoken with no uncertain sound on this important matter, by declaring that the advertisement, by any of its Licentiates, Members, or Fellows, of "medical works in other than medical publications" is censurable by the College.

MR. ANTHONY TROLLOPE.

MR. ANTHONY TROLLOPE is suffering from aphasia, with some loss of power of the right side. He has never at any time been unconscious, and there has been nothing of the nature of a fit. His intellect remains unimpaired, and he is perfectly cognisant of everything that is being done for him. The attacks of shortness of breath, from which he has recently suffered, distress him from time to time, but he continues to progress favourably. Dr. Murrell visits him daily, and Sir William Jenner has seen him twice in consultation.

THE annual course of five lectures, free to the public (as required by the will of Mr. Brown), will be delivered by the Professor-Superintendent of the Brown Institution (Dr. C. S. Roy), in the theatre of the University of London, on the afternoons of the 20th, 22nd, 24th, 27th, and 29th of the present month, commencing each day at half-past five o'clock. Subject: "On the Experimental Pathology of the Heart."

DR. ARTHUR VERNON MACAN has been elected to the post of Master of the Rotundo Lying-in Hospital, Dublin, in the vacancy caused by the retirement of Dr. Lombe Atthill. There was little interest connected with the appointment, as it was a foregone conclusion that Dr. Macan would be elected.

THE Sandbach Local Board have been threatened with dissolution by the Central Board for inattention to the request of the latter Board for information with respect to the sewage-disposal of the town, also for delay in taking steps towards providing a proper water-supply.

IN the report presented by the General Purposes Committee to the Brighton Town Council last week, the expenses connected with Dr. Richardson's inquiry were stated to be £535, whilst those arising from the investigation of Sir J. Bazalgette amounted to £224.

AT the College of Physicians in Ireland an election for an examiner in sanitary law and in sanitary engineering, to examine candidates for the certificate in Sanitary Science for the ensuing year, will take place on December 1st.

PERHAPS it may be well to remind intending competitors that the essays for the Triennial and Jacksonian Prizes of the College of Surgeons must be sent in on or before Saturday, the 30th prox., addressed to the Secretary of the College.

DR. SEDGWICK SAUNDERS, medical officer of health for the City of London, reports for the week ending the 4th inst. a death-rate of 8·11 per 1000—a rate lower, he believes, than any yet recorded for the same area.

THE guardians of St. Saviour's Union have agreed to pay 1s. a day for a pauper patient sent to Guy's Hospital for treatment, the case being one of ophthalmia.

THE Treasurer of the Lincoln Lunatic Hospital has received a legacy of £200, under the will of the late Mr. William Keep, for the benefit of the institution.

THE MINUTES OF EVIDENCE BEFORE THE ROYAL COMMISSION ON MEDICAL ACTS.

II.—THE INEFFICIENCY OF THE MEDICAL COUNCIL.

Examination of Sir JAMES PAGET, Bart., F.R.S.

246. (*Lord Camperdown.*) Can you suggest any better central body than the present Medical Council?—No.

247. Then the chief function of the Medical Council in connexion with the questions of study and examination would apparently consist, in your opinion, in supervising and reporting upon these matters?—Yes.

248. And not in exercising any direct authority?—I would have them exercise no direct authority. They should have power to check manifest and grave wrongs, but not to interfere in any manner in matters of detail.

249. Would you kindly give us your reasons?—I think that all these questions of detail are managed best by those who are nearest both in time and local relations to the teachers and the schools. The conduct of the schools must in great part be determined by the examiners; the conduct of the examiners must in great part be determined by what is possible in the schools; and therefore the relation between examiners and schools cannot to my mind be too close. Then next above the examiners are the several licensing authorities, whether separately or in conjoint boards; and they would be much nearer to the office of teaching and examining than the Medical Council can be. The Medical Council of necessity consists for the most part of seniors and persons who, I dare say with great justice, are elected to that high dignity; but they are not for the most part such as have lately been engaged in practice or in examining, and are not completely familiar with the progress of science at the present time, or with the manners of teaching in the schools.

253. With regard to the present constitution of the Medical Council you are aware, no doubt, that there has been a considerable demand for direct representation from a certain portion of the profession, or at all events from certain persons who profess to represent the working profession?—Yes.

254. You, I believe, gave your opinion on the subject on a former occasion?—Yes.

255. Would you mind repeating it shortly?—It seems to me to be just one of those cases in which public feeling should be satisfied. It seems to be deemed desirable by the public feeling that the profession should be represented on the Medical Council. I think it will make no difference whatever in the manner or the quantity of work done by the Council, and for the satisfaction of the feeling I think it should be granted. I have no other motive for thinking so.

256. I think you have already said that the addition of a few members to the Council, or the taking away of half a dozen members, would make, in your opinion, very little difference in the working qualities of the Council?—Very little difference.

257. You have no doubt considered the relative share of the representation on the Medical Council which belongs to different individual bodies. Do you consider that there ought to be any change in any instance?—No, I have no clear opinion on the matter. It seems to me, as often as I have thought of it, to be in the same condition of apparent inconsistency as I am told the constitution of the House of Commons is, where the 4,000,000 of London are represented by only the same number of members as might be found in some small set of boroughs in the country.

258. In the House of Commons they are talking of redistribution schemes; would anything of that kind in this case be desirable?—I think it might be, as soon as the House of Commons has made a satisfactory redistribution.

387. Would you give the Medical Council any power of saying that the schemes adopted by the several conjoint bodies were reasonably uniform as to value?—Yes, reasonably uniform.

388. I mean not fixedly uniform?—Yes, reasonably uniform, and that the standards were so too.

488. (*Mr. Simon.*) Am I right in thinking that your view of the organisation to be desired would be something to this effect, that in each division of the United Kingdom there should be a Board constituted of the existing authorities?—Yes.

489. Those authorities to be placed under the supervision of a General Council?—Yes.

490. That General Council having for its functions to make broad regulations upon matters of education?—Very broad ones.

491. To see to the reasonable uniformity of qualifications as between the three divisions of the United Kingdom?—Yes.

492. And in relation to all three divisions, so far as might be necessary, to keep up as high a standard as the circumstances of the time would allow of medical education?—If it is meant that it should be left to the Medical Council to raise the standard, I do not agree to it. I should leave that to the several bodies and the Medical Council should approve; but I should not regard the Medical Council as the best judge of either the time, or the method, or the degree of raising it.

493. You mean that if there was a difference between the standard of one division and another the General Council would form its opinion whether the lower of the two was too low?—Yes.

494. And would act accordingly?—Yes.

495. And would in that sense act in the maintenance of a higher standard?—Yes. As I understand the question, it is, would you grant more power to the Medical Council—that is, should the Medical Council have more power to compel. I do not think it should have that.

496. I was speaking of the tendency of what its influence should be. It is the body to which one would look to use influence in favour of the higher standard where there was difference between the divisions as to their particular standards?—Yes.

497. And you would look to the divisional boards constituted out of existing authorities to regulate the details of education?—Yes.

498. And to appoint directly or indirectly the examiners for this purpose?—Yes.

499. And it was that sort of plan, as a voluntary plan, that you would have in England by the action of the Committee of Reference of which you were chairman?—Yes.

500. But you think it would be a good thing that a similar arrangement should be adopted in each division of the kingdom. I do not mean similar in details, but similar in principle?—Similar in general principle.

Examination of Prof. PAGET, M.D., F.R.S., *of Cambridge.*

883. (*Chairman.*) Now, let me ask you a question with regard to the number of the Medical Council. Do you think that it would be possible to reduce the present number of the Medical Council?—It would not, I think, be right or wise to reduce it as things are at present. In the first place there are six nominees of the Government. I think my experience of those gentlemen, while I was for eleven years a member of the Medical Council, was that they were very efficient men, indeed; their voice was a very useful one in the Medical Council. I think any reduction in their number would be an alteration for the worse. Then the others (with the exception of the President) are representatives of the different licensing bodies. Now, under the Act of 1858, the doings of any one of those bodies are liable to be discussed by the Medical Council publicly, and they are even liable to be brought up before the Privy Council. These bodies are, all of them, subject to a certain amount of control by the Medical Council. The Council has a controlling power over their proceedings with reference to medical diplomas and degrees. I think that is an abundant reason why these bodies have a right to be represented on the Medical Council. Being in a certain sense governed by the Medical Council, they have a right to be represented in it. Of course, in the case of a conjoint board, that state of things might be altered. Besides that, there is another very good reason for it, the chief business of the Medical Council being to deal with medical education and medical examinations, I think those nineteen bodies are the very bodies of the whole country fittest to select persons suitable for the purpose.

884. Would you be disposed to make any change in the representation of the various bodies on the Medical Council?—There they are. If I had been consulted before 1858 I should have made one or two little differences. I think it is not quite fair that the University of Edinburgh should be linked with Aberdeen. I think the University of Edinburgh should have been linked, certainly, with St. Andrews, which has not anything like the same claim to being individually represented.

885. You are aware of the cry which has arisen for direct representation of the general profession in the Medical Council?—Yes.

886. Would you give us your opinion upon that point?—My opinion is, that persons elected in the way which has been proposed would not add to the efficiency of the Medical Council for its principal duty—namely, that of controlling and superintending medical education and medical examinations; therefore I do not think it is for the interest of the public to have persons elected in that way, but (I think there is a "but" to it) I think persons elected in that way would more directly than the present members represent the interests of the mass of the medical profession, and now and then subjects have been brought before the Medical Council which have been subjects not of medical education chiefly, or at all, but subjects relating to measures a little affecting the interests of the medical profession. If such questions be brought before the Medical Council, then, I think, there is some ground for a claim on the part of the profession to be more directly represented in it. In the year 1878, I think, the Government requested the opinion of the Medical Council on two points; one was the propriety of admitting women on the Medical Register, and the other was the admission of colonial and foreign graduates to the register on different terms to those on which British graduates are admitted. Both those were questions affecting the interests of the mass of the profession at large; and I think if such questions be discussed by the Medical Council the mass of the profession have some claim to be directly represented in it. The only other thing I have to say about it is that I think this question is of far less importance than it has been made either one way or the other. I would add one single word, if it were determined that such persons should be elected, I think the inconvenience and turmoil of those general elections should be minimised. It has been proposed that those members should be elected for five years. I would suggest, if that were the case, that supposing one of those members should resign, or become incapacitated, or die, that that single vacancy should not be filled up by another general election, but that the vacancy should be filled up by the Government, or in some other less troublesome way than by a general election, so that the profession might not be disturbed by those elections more frequently than necessary. I see that a Bill, which is now before Parliament, and which was, I think, brought in by Mr. Hardcastle (it is dated 1881), proposes a Medical Council consisting of twenty-six members, appointing six by direct representation, and leaving out of representation the Faculty of Glasgow, the Apothecaries' Society of London, and the Apothecaries' Hall of Dublin. I think if a Medical Council were established in the mode proposed in that Bill then such vacancies as might occur in the way I have mentioned, that is accidental vacancies, might with propriety be filled up in each division of the kingdom by those bodies which are left out of representation.

887. Do you wish to add anything to your evidence on the licensing question?—No, I think not; I do not remember anything.

Professor HUMPHRY.

The following suggestions were handed in by Professor Humphry in reference to the

Medical Council.

Functions.—Not to be regarded as representing certain bodies, but as acting in the interests of the public, with the view that the qualifications of those entering the profession may be sufficiently high, but not so high as to lead to undue diminution of the numbers.

To receive and consider education and examination rules from the conjoint board. In case of non-approval, to confer with the board. If necessary, to make representation to the Privy Council.

To adjust differences between the combining authorities on the board, and between the latter and the medical schools, with appeal to the Privy Council.

To make suggestions to the board respecting education and examination.

To visit examinations conducted under the board and under the medical authorities.

To see that the examinations and rules, and fees, in the three divisions of the kingdom are nearly equal.

To prepare and publish the Pharmacopœia.

To keep and publish the Medical Register, and to strike off names from it as at present.

To report annually to the Privy Council their proceedings, statements respecting education and examination, a financial statement, &c.:—

Constitution:—

6	to be appointed by Crown as at present.						
2	,,	,,	by Conjoint Board for England.[1]				
1	,,	,,	,,	,,	,,	,,	Scotland.[1]
1	,,	,,	,,	,,	,,	,,	Ireland.[1]
2	,,	,,	by whole profession in England.				
1	,,	,,	,,	,,	,,	,,	Scotland.
1	,,	,,	,,	,,	,,	,,	Ireland.
14							

Members of the board not to be members of the Council unless appointed as such by the board.

Appointment of four members by the profession a concession to wishes of profession, not as being a good mode of appointment.

Appointment of four members by conjoint boards, for the purpose of maintaining good relations between the board and the Council.

Present Medical Council has worked as well as councils usually do, as well as could be expected, seeing that it is composed of members, busy men, from the three divisions, and had to harmonise the views and interests and customs of the three divisions. Its influence has been considerable. The representation of several authorities by its members has facilitated improvements. Visitation of examinations has been beneficial, but it needed to be supplemented by visitation of schools.

Absolute authority should not be vested in the Council, however composed. Better that one body (the board) should make rules for education and examination, and conduct the examinations; and that another body (the Council) should consider and report upon these rules to the Privy Council. The intervention of the Privy Council would be rarely necessary.

The number of medical authorities might with advantage be reduced.

Foreign and colonial practitioners should be required to pass the practical and clinical parts of the Board examination, in the same manner as those who have passed the examinations at the British universities.

Examination of Dr. JACOB, *of Dublin.*

Dr. Jacob said (examined by the *Chairman*) the subject of direct representation had been repeatedly discussed in the last six or seven years by the Irish Medical Association, and as often the Association had petitioned Parliament in favour of this change.

1352. Speaking from your own knowledge, do you believe that the general body of practitioners really attach great value to direct representation?—I do decidedly.

1353. Is that because they regard the Medical Council as charged with the duties of supervising general study and examination, or is it because they regard it as a sort of medical parliament at which general questions affecting the medical profession would be entertained?—The feeling of the profession in Ireland, so far as I understand it, is that the General Medical Council has not been successful in the purpose for which it has been established by reason of its misconstitution; part of its misconstitution being the omission to represent the medical practitioner, and the representation of the licensing bodies being altogether excessive and redundant.

1354. In what way has the Council failed, in your opinion, to represent the medical practitioner in Ireland?—In the subjects in which the general working practitioner is daily interested. For instance, the practice of the profession by unlicensed persons has not been dealt with by the General Medical Council at all; on the contrary, the Council has definitely declined to enter upon any course of checking unlicensed practice whatsoever; and the result of that is that, both in Ireland and elsewhere, the practice of the profession by unqualified persons has gone on unchecked, and has achieved great proportions. The feeling of the profession, also, is that even if this function were not neglected by the General Medical Council, the presence of direct representatives in the Council is necessary to counterbalance the

[1] Professor Humphry proposes to leave out of the Conjoint Boards for England, Scotland, and Ireland, respectively, the Apothecaries' Societies of England and Ireland and the Faculty of Physicians and Surgeons of Glasgow.

excessive influence of the licensing corporations in that body.

1355. Do you consider that Parliament in passing the Act of 1858 intended that the Medical Council should deal with this question of unqualified persons practising?—I am strongly of that opinion.

1356. In your opinion, did the Act of 1858 give to the Medical Council the power of dealing with that question?—Certainly, I think they possess that power.

1357. Would you point out to me what clause gave them that power?—I think they have power under the 40th section of the Act of 1858. That section says: "Any person who shall wilfully and falsely pretend to be, or take, or use the name or title of a physician, doctor of medicine, licentiate in medicine and surgery, bachelor of medicine, surgeon, general practitioner, or apothecary, or any name, title, addition, or description implying that he is registered under this Act, or that he is recognised by law as a physician, or surgeon, or licentiate in medicine and surgery, or a practitioner in medicine or an apothecary, shall, upon a summary conviction for any such offence, pay a sum not exceeding twenty pounds."

1358. You see the important part of it is, "or any name, title, addition, or description implying that he is registered under this Act?"—Yes. No effort whatsoever has ever been made by the General Medical Council, so far as I know, to enforce these penalties against persons practising without qualification.

1359. Where does the Act say that the Medical Council is to enforce these penalties?—The Act does not put it upon the Medical Council to do so. But I consider that inferentially it is the duty of the General Medical Council to carry into effect the objects for which the Medical Act was constructed, and that the suppression of illicit practice was one of those objects which has not been carried into effect.

1360. Then Parliament has not imposed that duty upon the Medical Council, I understand?—It is not stated in the Medical Act that the Medical Council is charged with that duty; but the Council is charged generally with the administration of all the purposes of that Medical Act, this being one of those purposes.

1406. (*Master of the Rolls.*) Although I have not been here from the commencement of your examination, I understand that you are in favour of direct representation, as it is called, on the Medical Council?—I am.

1407. Do I understand that you wish the functions of the Medical Council to remain as they are, or to be extended?—I think that the powers which the Medical Council now possess might be made more definite and more explicit; but I think it possesses most of the powers—in fact, I would say all the powers—necessary, if they were made more explicit and definite.

1408. Do you think that those powers could be more usefully exercised, without the attendance of the public press at their debates?—No, I think they would be much less usefully exercised in that way.

1409. Have you directed your attention to the proportionate representation which you would like? I do not understand that you wish all the members of the Council to be elected by direct representation?—Certainly not.

1410. What proportion would you say?—The method of reconstruction which, if I were asked my opinion, I would suggest would be, firstly, that the Medical Council, as it at present stands, should be materially reduced in number; first, by disfranchising certain bodies which seem to me not to have a right to appear on the General Medical Council, and, secondly, by coalescing together other medical bodies whose functions are somewhat analogous, and whose share in licensing is not very large. And having so reduced the numbers, I would then add six direct representatives.

1411. And how would you elect those six; would you have separate ones for England, Ireland, and Scotland?—Yes.

1412. I suppose they would be divided in some way between the three divisions of the kingdom?—The branch registers of each of the three parts of the kingdom would supply the means of division.

1413. Then each of the divisions of the kingdom would elect one or more members of the Council; how do you propose to elect them?—In the same way as ballot elections are generally held, by sending round a voting paper at a given date; certain members being nominated, and their names contained upon this voting paper, let the vote be given. This voting paper being sent round from the Branch Medical Council to all the practitioners appearing on the register of that Council at their registered addresses, and having been filled up, would be returned duly signed; and then the votes should be totted up. This election I would propose to be held every three or five years.

1414. You think that that would be a sufficient guarantee; that it is not very likely that people would take the trouble to commit fraud in such an election?—No, I believe not. Besides, I believe that arrangements, which would get rid of any chance of fraud, are quite capable of being made for voting by paper. In the case of synod elections in the Irish Church they are largely held now by paper votes, and there is a machinery by which it can be done without any danger of fraud. My calculation is that this would cost about £200 to the General Medical Council every three or five years, and my opinion is that that £200 would be amply repaid to the Council by the corrections in the Medical Register which the election circulars would bring home to them. The Medical Register now is an inaccurate document, from the fact that a man once placed upon the register cannot be removed from it except under the Act of Parliament, and by compliance with certain clauses of the Act of Parliament; and if he dies without the knowledge of the registrar, or removes from one place to another, or retires from practice without giving notice, as happens in many instances, his name then still appears. Therefore, I take it, the expense incurred in this matter need not be considered, as the thing itself would yield a return irrespective of the elective return.

1594. (*By Mr. Cogan.*) Which do you think should be disfranchised and which coalesced?—I am strongly of opinion that the Apothecaries' Company, both in Dublin and London, should cease to send representatives, and I think that the Glasgow Faculty has ceased probably to have a claim. Those are the three bodies which I would name as open to disfranchisement, and as to coalescence, I should think that the University of Durham might advantageously be conjoined with some other body in returning a representative. I do not like to individualise, but I am quite clear with reference to those that I have named.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 6058 births and 3522 deaths were registered during the week ending the 11th inst. The annual death-rate in these towns, which had been equal to 21·4 and 21·3 per 1000 in the two preceding weeks rose to 21·7 last week. The lowest death-rates in these towns last week were 12·9 in Brighton, 15·6 in Wolverhampton, 15·7 in Leicester, and 16·5 in Norwich. The rates in the other towns ranged upwards to 28·2 in Liverpool, 28·3 in Cardiff, 28·4 in Manchester, and 32·4 in Sunderland. The deaths referred to the principal zymotic diseases in the twenty-eight towns were 468, showing a further decline from recent weekly numbers; 131 resulted from scarlet fever, 101 from measles, 98 from "fever" (principally enteric), 59 from diarrhœa, 46 from whooping-cough, 27 from diphtheria, and 6 from small-pox. The lowest death-rates from these zymotic diseases were recorded in Plymouth and Leicester, and the highest in Sunderland and Cardiff. Scarlet fever showed the largest proportional fatality in Sunderland and Cardiff. No fewer than 19 of the 27 deaths from diphtheria in the twenty-eight towns were recorded in London. Small-pox caused 4 deaths in London, and 1 both in Wolverhampton and in Newcastle-upon-Tyne. The number of small-pox patients in the metropolitan asylum hospitals, which had declined in the three preceding weeks, from 84 to 70, were again 70 on Saturday last; 13 new cases of small-pox were admitted to these hospitals during the week, against 8 and 7 in the two previous weeks. The deaths referred to diseases of the respiratory organs in London, which had been 355 and 347 in the two preceding weeks, further declined to 330 last week, and were 126 below the corrected weekly average. The causes of 114, or 3·3 per cent., of the deaths in the twenty-eight towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Plymouth, Derby,

and Huddersfield. The proportions of uncertified deaths were largest in Oldham, Halifax, Hull, Sunderland, and Newcastle-upon-Tyne.

HEALTH OF SCOTCH TOWNS.

The annual death-rate in the eight Scotch towns, which in the four preceding weeks had steadily increased from 19·2 to 24·3, declined again to 22·0 in the week ending the 11th inst.; this rate exceeded by but 0·3 the rate that prevailed last week in the twenty-eight English towns. The deaths referred to the principal zymotic diseases in these Scotch towns, which had declined in the six preceding weeks from 117 to 85, were 89 last week, and equal to an annual rate of 3·8 per 1000. The deaths from diphtheria in the Scotch towns, which had been 16, 19, and 24 in the three previous weeks, further rose to 25 last week, of which 6 occurred in Glasgow, 5 in Dundee, 5 in Aberdeen, and 4 in Edinburgh. The 21 deaths from diarrhœa, including 8 in Glasgow, were one above the number in the previous week. The 15 fatal cases of whooping-cough, however, showed a decline from the increasing numbers in recent weeks; 5 were returned both in Glasgow and Dundee. Of the 12 deaths from measles, 8 occurred in Dundee and 4 in Glasgow. The deaths referred to "fever," which had been 12 and 6 in the two previous weeks, rose again to 11 last week, of which 6 occurred in Glasgow. Four of the 5 deaths from scarlet fever were also returned in Glasgow. The deaths referred to acute diseases of the lungs in the eight towns, which had increased from 100 to 135 in the four preceding weeks, were 130 last week, and 2 above the number in the corresponding week of last year. The causes of 88, or 17 per cent., of the deaths in the eight towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 22·5 and 20·4 per 1000 in the two preceding weeks, rose to 27·7 in the week ending the 11th inst, and exceeded that which prevailed in any week since the middle of May last. During the first six weeks of the current quarter the death-rate in the city averaged 22·9, against 19·9 in London and 18·3 in Edinburgh. The 185 deaths in Dublin last week showed an increase of 51 upon the number returned in the previous week. The deaths from the principal zymotic diseases, which had been 8, 13, and 14 in the three previous weeks, were again 14 last week; they were equal to an annual rate of 2·1 per 1000. The deaths from "fever," which had been 5 and 7 in the two previous weeks, rose to 8 last week, and exceeded the number in any week since the beginning of September. The fatal case of diphtheria was the first recorded within the city since the end of September. The deaths both of infants and elderly persons showed a considerable increase upon the numbers returned in recent weeks.

THE SERVICES.

Brigade Surgeon W. R. Oliver, A.M.D., has received orders to join at Colchester for duty in the Eastern District.

Surgeon-Major W. D. Wilson, A.M.D., has received orders to hold himself in readiness to return to Egypt for duty.

ARMY MEDICAL DEPARTMENT.—Brigade Surgeon George Langford Hinde has retired on temporary half pay; Brigade Surgeon Nicholas Ffolliott has been granted retired pay, with the honorary rank of Deputy Surgeon-General; Surgeon-Major William Fuller Bennett, M.D., has been placed upon temporary half pay on account of ill health.

ADMIRALTY.—To be Hon. Surgeon to Her Majesty: James Jenkins, Esq., C.B., M.D., retired Inspector-General of Hospitals and Fleets, vice Dr. Johnston, deceased. Deputy Inspector-General of Hospitals and Fleets Samuel S. D. Wells has been promoted to the rank of Inspector-General of Hospitals and Fleets, in Her Majesty's Fleet, with seniority of Nov. 10th.

The following appointments have been made:—Fleet-Surgeon Charles H. Slaughter, to the *Northampton*; Surgeon Anthony R. Lynch, to Sheerness Dockyard, vice Breton; Fleet Surgeon James Thomson, to Chatham Dockyard, vice Charles H. Slaughter.

Correspondence.

"Audi alteram partem."

THE DISCOVERY OF TRICHINA SPIRALIS.

To the Editor of THE LANCET.

SIR,—In the lately issued edition of "Quain's Dictionary of Medicine" I found, under article Trichina, the following: "A genus of nematoid worms originally established by Professor Owen for the reception of the minute spiral flesh-worm (*T. spiralis*). This entozoon was first discovered by Sir James Paget when a student at Bartholomew's Hospital."

As in the paper[1] originally establishing the genus and species I detailed the series of microscopical observations supporting such conclusion, made in the conviction of their originality, and that the knowledge so gained was acquired prior to any other information on the subject, the statement by Dr. Cobbold, the writer of the article above quoted, may lead to the inference that my zoological conclusions were based upon facts due to another and prior observer, and may render me liable to the suspicion of having done injustice to Sir James Paget.

I still retain the letter accompanying the portions of muscle of the subject received in the dissecting-room, transmitted to me by Mr. Thomas Wormald, then (Feb. 3rd, 1835) Demonstrator of Anatomy at St. Bartholomew's Hospital. It is as follows:—

"Dear Owen,—I send you some sort of organised being, as I believe, which occupies the muscles of a subject under dissection at St. B. H., and, as I know you are a keen hand for parasitical things, from 'crabs' downwards, I send the enclosed for your inspection.—Ever yours sincerely,

(Signed) "THOS. WORMALD."

The honest, downright character of my correspondent is a fixture in the memories of all who knew him. Had the discovery of the nature of the "organised being" been made at the date of that letter by any student or officer in the anatomical school, it would have spread through the dissecting-room, and it is inconceivable that Wormald would have failed to mention the fact.

No other notice or information whatever had reached me of this case with its peculiar muscular condition. On the day after receiving the letter and specimen I replied by informing my friend that the calcareous specks were cysts enclosing one or more microscopic worms, the nature of which I should shortly publish. My worthy correspondent died in the conviction of my rightful claim as discoverer of *Trichina spiralis*, as I was assured by his son, Mr. P. H. Wormald, shortly after his father's decease. The only student at St. Bartholomew's, at that time an expert in microscopical research, was Arthur Farre (now M.D., F.R.S.), who communicated an acceptable addition to the anatomy of *Trichina spiralis* to the *London Medical Gazette*, December, 1835, under the conviction, common to the medical school, of my independent relation to the species as its discoverer.

It was not until I had completed my researches and drawings that I learnt that Mr. Paget had taken portions of the muscles of the same subject to the botanical department of the British Museum, where the microscope of Robert Brown had enabled him to recognise the wormlet in the cyst, and this I did not fail to state in the paper above cited.

I am, Sir, your obedient servant,

RICHARD OWEN.

Sheen Lodge, Richmond Park, Nov. 14th, 1882.

A NEW AND VERY DELICATE TEST FOR GRAPE SUGAR.

To the Editor of THE LANCET.

SIR,—While using picric acid as a test for albumen in the urine, I have, as it were by a happy accident, come upon what I believe to be an extremely sensitive test for grape sugar, whether in the urine or elsewhere. The history is briefly this:—Amongst my morning patients on Tuesday, Nov. 14th, there were two whose urine, as I knew from

[1] Transactions of the Zoological Society, Feb. 1835, p. 315, Pl. xii.

previous examination, contained albumen and a trace of sugar. To the first specimen I applied what is known as Moore's test for sugar—i.e., boiling with an equal bulk of liquor potassæ. The quantity of sugar being small, the brown colouration was very slight, and it occurred to me to add a small quantity of a saturated solution of picric acid to the boiling mixture, when in an instant the liquid assumed a deep purple, almost black, colour. I tried the same experiment on the second specimen of slightly saccharine urine with the same result. When equal volumes of liquor potassæ and a saturated solution of picric acid are mixed, there is usually a precipitate of picrate of potash; on boiling the mixture the precipitate is dissolved, and forms a transparent orange-red liquid. On adding a small quantity of saccharine urine to this liquid and continuing the application of heat the colour is rapidly deepened. The deepening of colour produced by the action of sugar is rendered more striking when the liquor potassæ is only slightly tinged yellow by a small amount of picric acid. It would seem that the effect of the picric acid is to intensify the reaction between the caustic potash and the sugar.

Having obtained this result, I added to the boiling mixture of liquor potassæ and solution of picric acid a drop or two of diluted grape juice, with the same intense deepening of the colour.

With a solution of cane sugar no change of colour occurred; but when the cane sugar had been converted into grape sugar by boiling with hydrochloric acid, the addition of a very few drops of the solution to the boiling mixture of liquor potassæ and picric acid solution caused immediately the same intense deepening of the colour as occurred with the addition of the saccharine urine.

As a result of these few but decisive experiments, I venture to say that by boiling this strongly alkaline solution of picrate of potash with a liquid suspected to be saccharine, we have a test for grape sugar far exceeding in delicacy the liquor potassæ test, or indeed, any other known test for that substance. It appears that the effect of the picric acid is to increase to an extraordinary degree the delicacy of Moore's well-known test for glucose.

I have ascertained that a solution of crystallised picrate of potash boiled with a solution of grape sugar causes no change of colour; the presence of caustic potash in excess is essential for the development of the reaction. I have also ascertained that 1·5 parts by weight of grape sugar dissolved in 10,000 parts of distilled water may readily be detected by this extremely delicate colour test. It is probable that the true limit of delicacy of the test exceeds this rather rough estimate, but I have given directions for more accurate determinations to be made, the results of which I hope soon to communicate.

I am, Sir, yours faithfully,

Saville-row, W., Nov. 15th, 1882. GEORGE JOHNSON.

SHOULD DISEASES OF CHILDREN BE MADE A SPECIALITY AT OUR GENERAL HOSPITALS?

To the Editor of THE LANCET.

SIR,—Any proposal for extending the teaching capacity of our general hospitals so as to provide more thorough grounding for students in a subject which is certain to occupy a very large share of their attention as general practitioners deserves careful consideration. At the same time it must not be supposed that any radical change in the corporate teaching of our medical schools is required. The healthy rivalry which has for many years existed between the different metropolitan schools has had the effect of securing for most of them a very efficient staff of lecturers and teachers. By the gradual introduction from time to time of more practical teaching the students have been brought face to face with subjects which require close individual study, and it has been found much easier to impress their minds with the minuter details of medical science. The lecturer on physiology, for instance, finds his task much lightened, knowing that by practical demonstrations in the laboratory he can teach through the eye and hand, as well as the ear, truths which if only once heard are very likely "to slip the memory." As a rule students have neither time nor inclination to attend the cliniques at the special hospitals. It has, therefore, been found necessary to establish special departments at our general hospitals for the study of diseases of the eye, ear, skin, and throat, &c. Not that these subjects were passed over in the previous arrangements for a complete curriculum, but that with the growth of knowledge it was found necessary to isolate each subject and appoint a separate teacher for each department. Those who have devoted much attention to the study and treatment of diseases of children will, I think, be ready to endorse what I have said as to the importance of making this a separate department at our larger hospitals. I shall doubtless be met by the objection, "Where do you propose to draw your line up to which the symptoms and treatment would be as for children, and beyond which the patient must be treated as an adult?" The answer is obvious—viz., that as "nature abhors a vacuum," so does she hate definitions. It is equally obvious that ranged on either side of puberty are patients placed under the same external conditions, suffering from the same exciting causes, but requiring treatment of a very diverse character, and that because of the vastly different constitutions and susceptibilities of children and adults. If I need to give an illustration, it is furnished by the carefully constructed tables of doses in our materia medica according to the standard of age. The student naturally infers from this that, given the general symptoms of a disease, it only requires to measure out the quantity, and not the quality, of the treatment in proportion to the age of the recipient. A casual perusal of the examination papers suffices to show that this is the *fons et origo mali* requiring consideration and amendment.

Before proceeding to define the details of the change which seem to be desirable, I must clear the ground by stating generally what provision is now made for students to acquire a knowledge of the injuries and diseases peculiar to children, of the symptoms which specially characterise the manifestations of disease and injury at all ages, and of the importance to be attached to correlative signs and symptoms as regards diagnosis, prognosis, and treatment, with a view to defining the distinct method of treatment in certain cases of the same disease in children as distinguished from adults. At many of our general hospitals there are special wards for children, but this seems designed more as a convenience than for special study. I am not aware that at any hospital a course of lectures is given on the diseases of children, either clinical or systematic.

At every medical school the obstetric physician includes in his syllabus of lectures "the diseases of children," or at least he is regarded as the authority on this subject. The reason, I suppose, for amalgamating these two departments under the superintendence of the professor of gynæcology is that the expert who undertakes the responsibility of divorcing a woman from her child is considered the proper person to medically superintend the early months of its independent existence. I can also understand why the obstetric physician claims to wield the *armamentarium chirurgicæ* in cases of abdominal tumour affecting women. It is quite another question whether this is a wise and proper division of labour. The teaching of obstetrics and gynæcology is a subject so vast and wide that little opportunity can be left for discoursing upon the diseases of children or upon the surgical treatment of abdominal tumour. I cannot but think such "a triple alliance" is calculated to prove disastrous both to the teacher and the taught. Physicians are not allowed to dispense medicines; why not restrict their use of surgical instruments? Then, as regards surgical diseases of children: do they not require special study? With the gradual introduction of "arms of precision" as aids to diagnosis, it might be thought that the *tactus eruditus* of the surgeon would be required for the delicate handling of such instruments.

I do not know exactly how much knowledge of pathology a surgeon is supposed to possess; but this I know, that little by little the physicians are claiming authority over diseases which have always been considered to belong to the special domain of the surgeon; and this just in proportion as the local manifestation becomes subordinate to the constitutional taint. Diseases of the throat and skin have gone, membranous croup becomes diphtheria by the same migratory process, rickets is about to surrender its former allegiance, syphilis is a febrile disorder requiring a siege train of medi-

cal experts and police to compass its downfall, and internal tumours, so far as "the better half" of mankind is concerned, fall before the knife of the obstetric physician. The surgeon will soon have nothing left to appraise himself with but joint disease, stricture, hæmorrhoids, and tumours. I desire to save a general stampede, and the public from being cajoled into the idea that operating surgeons are only qualified to use a knife, and that very sparingly. A conference of hospital surgeons and physicians might with advantage take this in hand and appoint a committee to draw up a list of diseases, arranged under different headings, and when approved the list could be printed and suspended in the waiting-rooms of hospitals to enable the executive to classify the patients according to a recognised plan. In the absence of such a system of classification great mistakes are made, time is lost in transferring the patients from one department to another, and occasional disagreements between colleagues are engendered thereby. At our general hospitals no attempt is as a rule made to treat the children separate from adults in the out-patient department. The sights and sounds which meet the eye and ear of children must often be very prejudicial to their moral and physical well-being.

I would sum up my arguments in favour of the establishment of a separate department for children as follows:—1. The arguments in favour of any speciality having a separate department apply equally and more forcibly as regards children. 2. Students acquire imperfect ideas as to the specific nature and treatment of disease in children when these are prescribed for at the same time as adults, having limited time for proper classification. 3. It is most important to give students special facilities for becoming acquainted with the diseases of children, as these must constitute the bulk of their practice in after-life. 4. The testimony of those who have held clinical appointments at hospitals for children is that the knowledge thus acquired is of a very different character from that usually obtainable at our general hospitals. 5. The present time seems opportune for making such a change, when a new nomenclature is being prepared, as it would be the first step in the direction of a scientific classification of medical and surgical diseases. 6. The fact of assigning medical diseases in young children to the care of the obstetric physician leaves the corresponding surgical diseases unprovided for specially. 7. In the diseases and injuries of children the symptoms are so markedly characteristic, and the treatment and general management of the little patients are so different that a special department seems a natural sequence. 8. The pathology of diseases of children would receive a fresh impetus, and scientific surgery would gain by the change.

Surgeons must not think that my proposal would involve the surrender of some of their possessions. On the contrary, by a proper classification of diseases many more would come under their superintendence. If one hospital surgeon undertakes the charge of all children under eight or ten years of age, the other surgeons will divide amongst them the surgery of adults, and thus the work is reorganised, and the students reap the benefit of the change as well as the patients. What I desire to advocate is a short course of lectures on the diseases of children, and a proper classification of diseases—medical and surgical.

Meanwhile I think I might say, on behalf of myself and my colleagues at the Victoria Hospital, that we shall be happy to welcome all students who desire to attend our cliniques for the purpose of studying the diseases of children.

I am, Sir, your obedient servant,

FREDERICK CHURCHILL, M.B.

Cranley-gardens, S.W., Oct. 1882.

THE CONTAGIOUS DISEASES ACTS.

To the Editor of THE LANCET.

SIR,—Dr. Macnamara seems to imagine that a Lock Hospital under the Contagious Diseases Acts, and a voluntary Lock Hospital, are one and the same thing. He probably never made a greater mistake in his life. In voluntary hospitals like the Dublin Westmoreland Lock, a female patient is free to come and go. She gets such treatment as she requires, and no doubt gratefully listens to such gentle admonition and advice as may be tendered by the chaplain and others. But it is a very different matter in the Lock Hospitals under the Contagious Diseases Acts. No woman can be admitted there unless she is registered as a common prostitute, and subjected to medical introspection. Do you know what registration as a prostitute means? What Dante wrote over the gates of hell—"Abandon hope, who enter here!" It means, in the words of the talented editor of the *Westminster Review*, "Ostensible social degradation; it sets upon them the mark of infamy; it compels them to commit themselves absolutely to a life of prostitution as a condition of continuing to exist." It is, in the words of Dr. Mireur, of Marseilles. (see his great work on Prostitution), "the sinister stroke by which women are cut off from society, and after which they no longer belong to themselves, but become merely the thing of the administration; they are cut off not from society only, but from heaven, from hope, and from the power to repent." Now, if Dr. Macnamara wished to prevent women from applying for treatment when diseased, he surely could not devise a more effectual deterrent than this; in fact, so great is women's abhorrence of the system that only one in ten, or one in seven, of undoubted prostitutes can be forced upon the register either here or elsewhere. Dr. Macnamara seems to fancy that the few who are forced upon the register may be reformed when in hospital, but they must be diseased first, or they would not be sent to hospital, and surely that is not a desirable consummation. Moreover, the unanimous testimony of the whole of the rescue societies is that when women have been brutalised by periodical introspection, it is impossible to reform them. Let anyone who doubts this statement drop a post-card to the Rescue Society, 85, Queen-street, Cheapside, London, and utilise the information he will receive in reply. As to the advanced stage of disease in which some women apply for treatment, there are many circumstances to be considered before we can pronounce an opinion on such conduct. Perhaps the woman did not know of the existence of the Lock Hospital, or was little aware of the kind treatment she would receive under Dr. Macnamara's skilful care. To make the most of such institutions information must be diffused; women must have every inducement to come forward, and none to turn away. The doors must be as it were always open, but they must be opened by Christian charity, and not by the police. The advanced stage of disease to be observed on the voluntary side of the London Lock is entirely owing to the want of accommodation; the cases are so largely in excess of the number of beds, that only the worst can be admitted. As the late Mr. Acton remarked, "The prize of a bed was offered to successful severity, and therefore it is no wonder that bad cases are to be seen in voluntary Lock Hospitals." In fact, Dr. Macnamara's evidence, if he did but know it, is all in favour of voluntary Lock Hospitals, and dead against the Contagious Diseases Acts. Balzac used to say that it was impossible to reform a woman but by the influence of a passion and a sentiment—love and religion; and such cynics, I am afraid, would laugh at Dr. Macnamara's tales of reformation. Let that be as it may, however, my experience has taught me that the lowest harlot is quite as anxious to be cured of venereal disease as any peer of the realms; I should say more so. And I am sure that voluntary institutions, well conducted, will accomplish infinitely more good than any vain and aggravating efforts at police control.

I am, Sir, your obedient servant,

EDGAR BECKETT TRUMAN, M.D.,

Physician to the Hospital for Women, Nottingham.

Nottingham, October 31st, 1882.

NEWCASTLE-ON-TYNE.

(From our own Correspondent.)

THE Medical Officer of Health for the borough has presented a report as to the presence of zymotic diseases in Newcastle during the fortnight ending Oct. 28th, 1882, of which the following is a summary:—Small-pox 32 cases, enteric fever 28, scarlet fever 42, typhus 7, diphtheria 1, continued fever 1. Upon the whole, as regards zymotic diseases, there had been a decrease of seven on the previous fortnightly return. Scarlet fever is still epidemic at Walker, where there had been ten deaths during the last month;

also some cases of small-pox. At Wallsend there had been several cases of scarlet fever, two proving fatal.

At Gateshead the subject of whitelead poisoning has very properly occupied the attention of the authorities, and at the board of guardians it was stated that cases of poisoning came under notice every week. After some discussion a memorial was presented to the Local Government Board, calling its attention to the serious loss of life and injury to health involved in the employment of females at whitelead works, and suggesting the expediency of regular medical attendance being made at such works, and the necessity of machinery being introduced to do the most dangerous part of the operations. It was mentioned in the discussion that when visits of inspection were made to lead works attention was called to a class of persons who had been employed at them for years, and who still enjoyed good health; but if inquiry was made into the nature of the work these people performed, it was quite different from that done by the poor people who suffered from lead-poisoning, and thus became a burden to the ratepayers. This request of the guardians seems to be a reasonable one. The worst of the whitelead manufacture is that the most dangerous part of the operations is carried on by the hands of females and young persons, who are naturally less able to resist the subtle influence of the poison.

There was a very interesting meeting held here on last Tuesday night of the North of England Microscopical Society, Mr. Mason Watson, treasurer, in the chair. Mr. N. H. Martin exhibited "Coles' Studies in Microscopical Science," comprising histological, botanical, and petrological preparations, with photographs and descriptions. The care with which these preparations were mounted excited admiration in the members present, and their general fidelity to nature was freely admitted; at the same time, from the conversation which ensued, it would appear that some of the speakers considered that the practice of staining microscopical preparations was open to some objections; at all events it was thought that staining should never be resorted to for mere ornament, and from a microscopical point of view was only allowable when, from chemical action or otherwise, it rendered structures more distinct. The Society, which is connected with the Royal Microscopical, is doing a good but quiet work in creating and fostering a love of natural science through microscopical pursuit.

The Bishop of Newcastle is making his presence felt here. The other day he made the round of the infirmary with Mrs. Wilberforce, and the other night he presided at a flower mission concert—that is, a very useful organisation whereby flowers are collected and distributed to poor patients laid up in our medical charities and elsewhere. Yesterday he preached, at the Cathedral of St. Nicholas, to the Mayor and Corporation. On this occasion the ceremony of "churching the Mayor," as it is called, takes place, and the collection, a good one, was taken in aid of the Hospital Sunday Fund. He made some pointed allusions to our profession; indeed, the bishop is evidently a working one, constantly taking part in aiding some of our charitable or philanthropical societies.

It is stated in our newspapers that the recently closed sanitary exhibition here was not a financial success. Various causes are assigned for this, such as the great popularity of the Tynemouth Exhibition, which was held at the same time, and which drew an attendance of upwards of 150,000 persons. Then, again, an impression had got abroad that the exhibits were commonplace and uninteresting, than which nothing could be more absurd, but the public taste is a curious thing and very difficult to discover, as many have found out to their cost. The exhibition building was placed in a most awkward and out-of-the-way situation, and this may have had something to do with the failure. The exhibition itself was most varied, instructive, and useful, and you will be glad to hear that many of the enterprising exhibitors were well rewarded for their trouble and expense in receiving a large number of orders for their manufactures.

A course of ambulance lectures is announced to begin here to-day by Mr. G. E. Williamson, assistant-surgeon to the infirmary, and having charge of the ophthalmic department there. The lectures are to be illustrated by the lantern and other means. The subject has fallen into good hands, and is certain to be well and lucidly treated by Mr. Williamson.

Newcastle-on-Tyne, Nov. 13th, 1882.

SCOTTISH NOTES.

(From our own Correspondent.)

JUDGING from Professor Pettigrew's introductory, and Professor M'Intosh's magnificent address at St. Andrews, the teachers in the science side are determined to shake the dry bones of that ancient, but somewhat somnolent, seat of learning. Professor Pettigrew strongly animadverted upon the almost complete want of encouragement given to science studies, passed a high eulogium upon these as helps to the highest culture, and eloquently argued for increased scope being given to work in the arts department, so that men might know something of themselves, and of what passes around them. I hope that the college authorities, for whom evidently the address was primarily intended, will, in laying their claims before the intended Executive Commission, give due heed to Dr. Pettigrew's suggestions. St. Andrews is at present threatened with death from general atrophy, and if there is any chance of rejuvenescence, it is probably through the help of science that vigour can be restored.

Dr. M'Intosh met a large audience of students and friends—chiefly the latter I fear—on Monday, and gave a summary of work done in marine zoology, in which he showed what a wonderful advance has recently been made. The simple quotation of Professor Edward Forbes' dictum, that animal life probably ceased at a depth of 300 fathoms, and the remembrance of the almost innumerable specimens obtained by the *Challenger* and other expeditions, at depths as great as from one to five miles, are sufficient to indicate the strides recently taken in this department of observation. Dr. M'Intosh went on to show the absolute want of zoological stations along our coast, forgetting evidently to refer to Dr. Cossar Ewart's successful efforts in this direction at Aberdeen, and proceeded to argue in favour of the equipment of several of these, but more especially one placed near the bay of St. Andrews, so rich in animal and vegetable life. This work is one demanding serious effort, and Dr. M'Intosh's enthusiasm could not lead him in a direction likely to be more profitable to science.

The Duke of Buccleuch, with his usual liberality towards the districts with which he is connected, has provided Dalkeith with an elegant and commodious hospital. The building was thrown open for public inspection a few days ago, and is now ready for the reception of patients. Consisting of two storeys, the upper floor is divided into airy and agreeable wards, which are capable of accommodating about fifty patients. Means of isolation for infectious cases are provided by a suitable arrangement of the wards, and the existence of separate staircases. The necessary accommodation for the staff of nurses and the efficient working of the institution is provided on the ground-floor, and recent improvements have been freely utilised. Ventilation, both of the house and the drainage system, has been carefully considered, and, as a further hygienic advantage to the inmates, a large space of ground has been left for out-door recreation. The police commissioners of the borough have suitably furnished the hospital, which has been handed over to them for the use of the inhabitants.

The centenary of the Montrose Royal Asylum and the recent extensive addition to the accommodation provided for patients there, have been taken by the Directors as a fitting opportunity for showing their continued confidence in Dr. Howden, the physician-superintendent, and they have raised his salary from £700 to £850.

After litigation in the English Court, it has been decided that the terms of Dr. Donald Fraser's bequest do not entitle the Scottish Society for the Prevention of Cruelty to Animals to the £10,000 claimed. The treasurer and trustees of the Donald Fraser Bequest to the Blind at Inverness were named as residuary legatees, and the decision of Mr. Justice Fry is that they have established their claim. If my memory serves me aright, the handsome legacy in dispute is that which, originally intended for the University of Edinburgh, was otherwise disposed of on account of Dr. Fraser's objection to the experiments upon animals supposed to be carried on in the institution named.

Various local scientific societies have recently held their first meeting for the session. The activity of the Perthshire Society of Natural Science is specially noteworthy, and

may be commended to gentlemen interested in similar societies elsewhere. After much exertion on the part of the Council, the friends of the Society were induced to subscribe a sum of over £2000 for the purpose of securing suitable premises as museums, lecture-rooms, &c., and since the building was opened a few months ago, the members have been most assiduous in furnishing specimens for the museum with the intention of having a complete collection illustrative of Perthshire natural history. In the interest of science generally, local societies are much more profitably engaged in establishing good local collections than in getting together a feeble imitation of our great natural history museums; and when intelligently guided, as the Perthshire always has been by men like the present Professor Geikie of Edinburgh, and Dr. Buchanan White, F.L.S., of Perth, such associations may be of the greatest value in completing the knowledge of the fauna and flora of our country.

Mr. Wragg has again completed for the year his work at the Meteorological Observatory on Ben Nevis, the highest station in Great Britain. Though his work is so well known, and its importance appreciated by all interested in the subject, it appears that the Scottish Meteorological Society find the utmost difficulty in providing the necessary funds for the erection of a permanent observatory; and for its partial endowment £5000 is the sum required, and it will be unfortunate if such a valuable agency must be dropped for want of timely pecuniary assistance.

ITALIAN NOTES.

(From our own Correspondent.)

THE elections under the extended suffrage and the *scrutin de liste* have wrought little change in the composition of Parliament, except in the greater number of professional candidates who have been returned. Like other continental nations, Italy sees no incompatibility between medical practice and a seat in the Legislature, and, as in Germany, Austria, Hungary, France, and Spain, she counts among her most active and able public men the consultant physician and the occupant of the University Chair. Between twenty and thirty representatives of her various professions, exclusive of that of law, are now also members of the Chamber of Deputies, to say nothing of the scientific and literary phalanx which reinforces her Upper House. Her Minister of Public Instruction is Dr. Guido Baccelli, one of the leading consultants in the Peninsula; and a prominent debater of the Opposition is Dr. Tommaso-Crudeli, whose researches in pathology shed lustre on the *sapienza*, and in a published form, dedicated to his master Virchow, are now engrossing the attention of other schools. The first volume, entitled "Istituzioni di Anatomia Patologica," containing his maturer work on germinal miasms—particularly malarial infection—has much to interest the thoughtful practitioner at home and abroad. With the universal recognition of public hygiene as one of the legislator's primary subjects, the presence of such men in any Parliament is more than justified; while cognate questions like the extinction of the phylloxera vastatrix and the prevention of floods, peculiarly urgent in Italy, would of themselves account for the preponderance of the scientific element in her Chamber.

Thanks, indeed, to such inspiration, the Italian Government has drawn a cordon round the vine-culture—a blockade which the phylloxera has not yet been able to run. The floods are, however, a more grievous opprobrium of public hygiene than ever, mainly from their prevention having been treated as exclusively a question of engineering. The destruction of forests, whether by the woodcutter or by frost or conflagration, is chiefly to blame for the heavy localised rainfall, which, in the Alta Italia, swells the mountain-streams in a few hours to torrents and the lowland rivers to lagoons. Of what avail is the engineer's embankment when the hillside, denuded of its forest, sends down the water in tons instead of gallons, and the swollen affluents contribute to the main streams in proportional excess of their hitherto estimated volume? For such visitations the remedy is not mechanical, but physical—the restitution to the uplands of their despoiled verdure, and with it the means of detaining and distributing the moisture and regulating the rainfall. Italy has, at length, awakened to this necessity and is encouraging the plantation of trees, particularly the eucalyptus, in appropriate places, holding out substantial rewards to the landowners who succeed best in clothing the hillsides with wood. The example of her French neighbour is having a wholesome effect upon her. Twenty years ago, or rather more, Savoy passed from her to France, and took with it the *damnosa hereditas* of autumnal inundations due to the reckless destruction of forests. The Emperor Napoleon immediately set himself to avert these unwelcome visitants, and restored to the old sub-Alpine territory its former pride of waving woods and lustrous foliage. In ten years Savoy was its former self again, and, thanks to its plantations, the floods that have visited it since 1872 have done but little material damage, in striking contrast with the desolation and misery they annually cause to the Italian motherland.

After the floods, the pellagra. This scourge, which was to have been abolished with the grist-tax, is now worse than during its incidence, and the physicians and philanthropists of the pellagrose districts have founded a society of prevention and cure. Its prospectus is before me, and provision is first to be made for the relief, and if possible, the restoration to health of the actual sufferers, and next for the removal, or at least the minimising, of the conditions under which the malady originates and spreads. For the former end, the pellagrose subjects are to have systematic treatment, according to the method of Lombrosi, in their homes or in hospital, while their children are to receive artificial lactation. For the latter end a hot-air drying apparatus is to be instituted for the garnered maize, and the Anelli oven is to be employed wherever practicable; the "economic kitchen," already in working, is to be extended and maintained; the feeding of the peasantry is to be watched, particularly to prevent the consumption of spoiled maize; and instruction is to be given in cleanliness of person and of home, and to make the people as far as possible the intelligent custodians of their own health. To carry out these provisions, resources are drawn from the Government, from the provincial and communal funds, from the donations of private individuals, and from the annual subscriptions of the associates. These latter are divided into two classes of both sexes, the active and the contributing: the active will charge themselves with the artificial lactation of the children, with the care of the pellagrose, and with the hygiene of the peasantry; while the contributing will subscribe at the rate of six francs a year. I expect to have soon a favourable report of this urgently needed and well-organised society.

The University of Palermo adds another to its specimens of teratology. In the neighbouring Castelbuono a woman was lately delivered of a female child with two heads well planted on the trunk, symmetrically proportioned, and with regular articulations, after a normal gestation of nine months. One head and the left arm presented first; but for several hours no further progress was made, and the child (such is the custom) received baptism. It was dead before the arrival of the surgeon, who, on extricating it, found the first head with the tongue protruding, and firmly fixed between the lips, the eyes also protruding, in token of the evident asphyxia. The second head was in the same condition, while the upper region of the trunk, in correspondence with the median point of the heads, was deeply lacerated down to the abdomen; the laceration was due to the forcible delivery necessitated by the resistance of the second head. The unfortunate mother died after forty-eight hours' suffering.

Rome, Nov. 6th, 1882.

MEDICAL TRIALS.

CITY OF LONDON COURT.—NOVEMBER 4TH.

(Before Mr. Commissioner KERR)

RECOVERY OF CHARGES FOR SERVICES RENDERED BY UNQUALIFIED ASSISTANTS.

BLOCK *v.* POETTING.

THIS was an action in which Mr. Moses Block, doctor of medicine, of 19, Chiswell-street, sought to recover from Mr. Richard Poetting, of 6, New Basinghall-street, the sum of £3 3*s.* for medical services rendered. Mr. Pease, solicitor, appeared for the plaintiff, and Mr. Lawrence, solicitor, for the defendant.

Mr. Emile Bransome, the plaintiff's assistant, said that

the charges were fair and reasonable, and that the defendant had been attended by himself and his employer.—His Honour: Are you a qualified medical practitioner?—Witness: No, but my employer is.—His Honour: But did you attend the defendant?—Witness: Yes, on behalf of Mr. Block.—His Honour: You had no right to do so.—Mr. Pease: Is this not a similar case to that of a clerk attending for a solicitor?—His Honour: No; the law says that a doctor cannot recover for medical advice given by his assistant.—Mr. Pease: But here the plaintiff is instructed; and sometimes he called upon the defendant, and sometimes the assistant did.—Mr. Lawrence: But did Mr. Block do all the work?—Witness: No; but he saw defendant several times during his illness.—Mr. Pease: Surely, your Honour, this is a monstrous defence?—His Honour: Indeed it is not.—Mr. Pease: Why should a medical man be compelled to call personally on a patient any more than a solicitor or counsel upon his client?—His Honour: Lawyers, unfortunately, are allowed to do extraordinary things. The law, however, says that if a doctor send his assistant to a patient the assistant must be qualified. I must find for the defendant; but will give leave to appeal if you like.—Mr. Pease: The defendant does not deny that he was attended.—Witness: And he preferred to be attended by me as he knew me.—His Honour: That only makes the case worse. I may tell you that you are liable to be indicted, and perhaps you will be so some of these days, if anything goes wrong.

Judgment was then given for the defendant with costs.

MEDICAL NOTES IN PARLIAMENT.

IN the House of Commons, on Thursday, the 9th inst., the report was presented of the Commission appointed to inquire into the subject of Criminal Lunacy; as was also a return of the number of deaths on board emigrant ships.

On Monday, Mr. Biggar gave notice of a series of questions as to the removal from Belfast Asylum to the workhouse of an inmate named Nelson; and Dr. Cameron intimated that he will question the Lord Advocate with regard to the diversity of powers of sanitary supervision and administration granted to local authorities in Scotland.

Union Medical Officers.

Dr. Farquharson asked the President of the Local Government Board whether his attention had been drawn to the case of "Grubb *v.* the Chesterton Board of Guardians," and the decision and comments of the Cambridge County Court judge thereon; whether the Local Government Board would modify their consolidated orders so as to prevent in future the contingency of a district medical officer summoning his board of guardians to pay him his extra fees; and whether he would lay upon the table of the House a copy of the correspondence between Dr. Martin O'Connor of Chatteris, Cambridgeshire, the Local Government Board, and the North Witchford Board of Guardians, Cambridgeshire, relative to the refusal of the latter body to pay a fee claimed by Dr. Martin O'Connor.—Mr. Dodson said he had seen the newspaper report of this case, in which a Poor-law medical officer obtained judgment for extra medical fees for attending a poor woman who had met with an accident. In regard to the proposed modification of the general order, it did not appear to him that the Local Government Board could so alter it as to prevent a medical officer taking legal proceedings against a board of guardians for extra medical fees if they declined to pay, or, on the other hand, require the guardians to pay such fees when not legally due. In regard to the correspondence, that would be produced if the hon. member liked to move for it.

Vaccination.

Mr. Hopwood asked the President of the Local Government Board in regard to the alleged inoculation of French soldiers with disease by vaccination, which occurred in December, 1880; whether he would think it right to lay upon the table all the information he had obtained on the subject.—Mr. Dodson said he could only repeat that the information which he obtained was so incomplete that it threw no further light on the subject, and he saw no advantage in laying it on the table of the House as it stood. At the same time, he was as anxious as his hon. and learned friend could be to obtain full particulars on the subject, and he had again requested the Foreign Office to endeavour to ascertain whether the French Government had made any further inquiries into the matter, and to afford the Local Government Board further knowledge on the subject.

Mr. A. Moore gave notice of a question relating to the reports received by the Irish Local Government Board as to the state of the emigrants' lodging-houses in Londonderry; and Lord George Hamilton intimated that he will make inquiry as to the refusal of the English Local Government Board to allow the Whitechapel Board of Guardians the means of obtaining a periodical inspection of the homes of boarded-out children.

On Thursday, in reply to Mr. Healy, Mr. Trevelyan explained that although the salaries of Irish coroners were payable half-yearly, the county treasurers usually deferred payment until the eve of the next assizes, when they had the necessary funds in hand.

Health of the Troops in Egypt.

Mr. Childers, replying to Sir H. Tyler, stated that the present percentages of sickness amongst the army of occupation in Egypt were 7 per cent. amongst the infantry and cavalry, and 11 per cent. amongst the artillery; but these percentages were gradually diminishing as the sicknesses of individuals came to an end. Sir Andrew Clark went to Egypt a week ago to inquire whether any improvements were desirable in the barrack arrangements and hospital accommodation; and meanwhile no expenditure on those services had been spared.

The Army Medical Department in Egypt.

Sir T. Lawrence asked the Secretary of State for War why the name of Surgeon-General Hanbury, commanding the Medical branch of the Egyptian Expedition, was omitted from the Parliamentary Vote of Thanks to the general officers and others of the Expedition; whether Surgeon-General Hanbury did not hold the relative rank of Major-General, and was of the same rank as the other Major-Generals whose distinguished services were specially acknowledged in the despatches of the General the Commander-in-Chief of the Expedition; and why the names of Deputy Surgeon-General Colvin Smith and the medical officers of the Indian Contingent were omitted from the despatches recommending the promotion of medical officers in the last despatch of the General Commanding-in-Chief.—Mr. Childers had to say, speaking on behalf of the First Lord of the Treasury and the First Lord of the Admiralty, who, with himself, were responsible for the language of the Vote of Thanks, that they followed the precedents, according to which it was not usual to mention departmental officers. He saw no reason for enlarging the already long list of names. As to the second question, it was true that Surgeon-General Hanbury held the relative rank of major-general. As to the third question, it was not for him to ask the Commander-in-Chief of an army why he either excluded or included in his despatches the names of particular officers, but, as a matter of fact, Sir Garnet Wolseley wrote a supplemental despatch, which would appear to-morrow, and in which he observed the name of Deputy Surgeon-General Colvin Smith.

Prevention of Floods.

In reply to Mr. Peel and Sir A. Otway, Mr. Dodson said he was aware of the damage and sickness caused by the floods at Strood and elsewhere, and he was fully sensible of the importance of giving the inhabitants of river basins power to avert these evils, but he was not now prepared to state what course the Government would pursue.

The Attempt to Shoot Judge Lawson.

Mr. W. Corbet asked the Chief Secretary for Ireland, having regard to the antecedents of the man Patrick Delany, and the circumstances under which he had been arrested on a charge of attempting to shoot Mr. Justice Lawson, whether he would direct a medical examination as to the mental condition of the prisoner.—Mr. Trevelyan said he had no intention of interfering with a matter which was already fully provided for by law.

PRELIMINARY steps have been taken towards the establishment of a cottage hospital at Abingdon. The sum of £638 has already been collected for the purpose, and a subscription of £50 per annum for the two or three years from the starting of the hospital has been promised.

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON. — The following gentlemen passed the Primary Examination for the Licence on the 9th inst.:—

Gofton Gee Adams, William Rushworth Ashworth, Charles Barlow, Thomas David Collis Barry, Lancelot Bathurst, Robert Sewell Batson, Reginald Treacher Bowden, Albert Bowhay, Joseph Thos. Boyd, Jabez Pratt Brooks, Samuel John Brooks, Robert Marston Bruce, Leopold Burroughs, Wm. Arthur Cahill, Herbert Bertram Cavell, Herbert William Chambers, Arthur Fredk. Gambell Codd, Arthur Wandesforde Comber, Charles Thomas Thornton Comber, Arthur Zell Claydon Cressy, Arthur Crossley, Domingo Antonio De Montbrun, Pedro Louis De Montbrun, John Patrick Cromly Dillon, Arthur Herbert Dodd, Walter Harry Dodd, Joseph Bowerman Drew, Herbert Ebenezer Edlin, Dennis Cawood Embleton, Henry Collen Ensor, Charles Ewart, Courtenay Jas. Fuller, Thomas Frederick Gardner, Gustavus Geo. Gidley, Charles Ernest Goddard, John Harley Gough, Walter Spencer Anderson Griffith, Harry Harlock, John William Harris, Hillyard William Haydon, Harry George Henderson, George Frederick Hentsch, Hugh Gardner Hill, Chas. John Holtom, George Hope, Joseph Duncan Howe, Francis Rowland Humphreys, Edwin Guy Hunt, Alfred William Hunton, Edward Jessop, Eugene Numa Joly, Hedley Gordon Jones, John Edw. Evans Jones, Herbert Arthur Kent, Charles Edw. Liesching, William Leppingwell Livermore, Arthur Maude, Charles Metzgar, John Perrett Millington, Henry Geo. Hawkins Monk, Joseph John Oakman, Harry Marmaduke Page, Herbert Lloyd Parry, Edmond Wm. Paul, Edmund John Penny, Alfred Ernest Albert Pettingill, Ernest Willmer Phillips, George Gordon Owen Phillips, Josiah Northey Phillips, Richard Pinhorn, Alexander Yates Reily, Herbert Ellis Rowell, John Jones Rowland, George Jervis Rugg, Charles John Sharp, Albert Smith, John Henry Spitzly, Hubert Samuel Stockton, Henry John Thornton, Hugh Champneys Thurston, Kankai Totsuka, Geoffory Frederick Travers, Edward Tait Trevor, Frederick Wenman Tuttle, Thomas Unicume, Arthur Wm. Wheatly, William Whitworth, John Grant Wilson, Harrie Yeo, Wm. Hamond Young.

ROYAL COLLEGE OF SURGEONS OF ENGLAND. — The following gentlemen, having passed the required examination for the diploma, were admitted Members of the College at a meeting of the Court of Examiners on Monday last:—

Atkins, George, L.R.C.P. Lond., Yealmpton, Devon.
Baker, William Brain, L.S.A., Banbury.
Boxall, Robert, L.R.C.P., Cranleigh, Surrey.
Bromley, Henry Urgest, Braintree.
Butterworth, Samuel, L.R.C.P. Edin., Rochdale.
Coombe, Charles Frederick, Wrothing.
Furnival, Francis Henry, L.S.A., Nottingham.
Heathcote, Ralph George, L.R.C.P. Edin., Manchester.
Herman, Christian Lawrence, M.B. Edin., Cape Town.
Lister, Joseph Herbert, L.S.A., Huntley-street.
Littlewood, John Oscroft, L.S.A., Sutton-in-Ashfield.
Priestley, John, L.S.A., Greenhays.
Shirley, Matthew Bernard, L.R.C.P. Edin., Leeds.
Smith, W. A. Winwood, L.S.A., Kensington-gardens-square.
Statham, Reginald Whiteside, L.S.A., Walworth.
Waring, John Arkle, L.R.C.P. Edin., Prince's-gardens.
Wilson, George, M.B. Edin., Lockerbie, N.B.
Wyborn, Samuel, L.S.A., Windsor.

The following gentlemen were admitted Members of the College on Tuesday last:—

Aslanian, Bedros, L.S.A., Van, Turkey.
Banham, William Wilfred, Barnsley.
Beatley, William Crump, M.B. Dub., Bloomsbury-square.
Bown, Arthur Thomas, Bath.
Dacre, John, Leeds.
Dale, Walter Frederick, L.R.C.P. Lond., Coleshill.
Guinness, Thomas Archibald, Greville-place.
Harries, Henry Jones, Pilroath, near Carmarthen.
Hall, Alfred, Ashbourne.
Hind, Wheeldon, Honington, Suffolk.
Hoar, C. de Samelez, Campden-hill-gardens.
Horrocks, William Henry, Liverpool.
Maye, John, L.S.A., Kingsbridge, Devon.
Myles, James Percival, L.R.C.P. Lond., Bristol.
Porter, Guy David, Abbey-gardens.
Price, Thomas William, Birmingham.
Salter, George Herbert, L.R.C.P. Edin., Mount-street.
Smith, James Edward, L.S.A., Hammersmith.
Sells, Hubert Thomas, Merrick-square.
Sunderland, Septimus, Birmingham.
Winder, William Henry, Manchester.

The following gentlemen were admitted Members of the College on Wednesday last:—

Bailey, Charles Frederic, Norwich.
Calger, Frederick Foord, Gloucester-street.
Cardwell, Thomas, Reading.
Crick, William Throne, L.R.C.P. Lond., Great Glen, Leicester.
Cuff, Robert, Camden-road, Blackheath.
Dakin, William Radford, Edith-road.
Davis, John Warren, L.S.A., Milford Haven.
Dun, Walter Angus, L.R.C.P. Lond., Cincinnati.
Ellison, William Augustine, Windsor.
Fraser, James Alexander, Blackheath.
Harrison, John, L.R.C.P. Edin., Braintree.
Hodges, Herbert Chamney, Walton, Herts.
Jennings, William Munro, Newcastle.
Kinch, George Henry, L.R.C.P. Edin., Hilldrop-crescent.
Leon, Greville Ewing, L.S.A., Hamilton, Bermudas.
Masters, Edgar Ernest, Lewisham.
Mead, Herbert Remington, L.R.C.P. Edin., Blackheath.
Smith, Howard Leon, Tollington-park.
Taller, George Arthur, Broseley, Salop.
Woodhouse, Alfred E. Clayton, Hanover-square.

Mr. Thomas Bryant, the newly elected member of the Court of Examiners, in the room of Mr. Birkett, took his seat at these meetings.

The following gentlemen passed the Primary Examination in Anatomy and Physiology at a meeting of the Board of Examiners on the 9th inst.:—

H. B. Matthias, W. H. Pinches, H. C. Parsons, M. G. Robinson, and J. C. Barker, St. Bartholomew's Hospital; E. Goodall, Guy's Hospital; E. F. Jones and A. M. Whitehead, London Hospital; A. E. Read, St. George's and St. Thomas's Hospitals; J. Pietersen, F. Todd, F. I. Dewes, St. Thomas's Hospital; P. E. Maitland, Madras Medical College; J. J. Dickinson, London Hospital and Cambridge School; F. Farrow, Owens College.

Of the 90 candidates examined during last week, 23 failed to satisfy the Board, and were referred for three months' further anatomical and physiological study.

APOTHECARIES' HALL. — The following gentlemen passed the examination in the Science and Practice of Medicine, and received certificates to practise, on Nov. 9th:—

Aslanian, Bedros, Dixon-street, L. Marsh.
Holdsworth, William, Freeman-street, Grimsby.
Jacob, Arthur Howard, Bernard-street, Russell-square.
Llewellyn, James Davies, Glyn-neath, Glamorganshire.
Mosse, Herbert Henry, Sutton, Surrey.
Peskett, Arthur Wm. Chalmers, Burgoyne House, Southsea.
Robinson, William, Great College-street.
Sturges, Frank, Beckenham, Kent.
Wheatly, Arthur William, Brailes, Warwickshire.
Young, William Hy. Frome, Pastor-place, Brighton.

The following gentlemen also on the same day passed the Primary Professional Examination:—

Norton Gilbert Gilkes, London Hospital; William Dymes Stevenson, Middlesex Hospital.

ALDERMAN W. F. CROSSKEY, M.D., C.M. Ed., has been elected Mayor of Lewes for the ensuing year.

MISS ANNA GRAYDON has left £1000 to the Adelaide Hospital, £500 to the Hospital for Incurables, and £500 to St. Mark's Ophthalmic Hospital.

AN asylum for the poor in Halifax, N.S., caught fire at midnight, and thirty-five of the helpless inmates were burnt to death.

AT the instance of the Pharmaceutical Society of Great Britain, a druggist was proceeded against last week at the Stockport County Court for describing himself over his door as "Analytical Chemist," he not being registered. The defendant was fined £5 and costs.

VACCINATION GRANTS.—The following gentlemen have received the Government grant for efficient vaccination in their respective districts:—V. Wanostrocht, M.B., of Escrick, York; Mr. C. W. Morris, Chipping Campden (fourth time).

THE MEDICO-PSYCHOLOGICAL ASSOCIATION.—The usual quarterly meeting of this Association was held at Bethlem Hospital on Wednesday evening, Nov. 8th. In the absence of the President, the chair was taken by Dr. D. Hack Tuke. Dr. Mercier read a paper on the "Conditions of Life affecting Insanity"; and Dr. Julius Mickle communicated some particulars on "Traumatic General Paralysis." An interesting discussion followed in each case, and, owing to the lateness of the hour, a paper by Dr. Fletcher Beach on "Atrophy of the Brain" was taken as read.

HULL GENERAL INFIRMARY.—The centenary of this charity was celebrated on the 12th inst. This hospital commenced as a temporary erection, and the present building in the form in which it was first raised was opened in 1784. In 1838 a large wing was placed at each end of the building at a cost of £3000; and more recently there have been added a new block at the back of the main portion, and several detached fever wards. The committee hope to raise £10,000 for the purpose of providing a convalescent home in connexion with the infirmary. The meetings on the 12th were attended by several noblemen and influential residents of Hull, and in the evening a demonstration of the Friendly Societies of the town took place, the members of which were addressed by the Archbishop of York, who, in his wonted genial manner, commended the efforts made by the working people on behalf of the hospital, and gave them some good advice on the questions of temperance and thrift.

THE MANCHESTER AND SALFORD SANITARY ASSOCIATION.—The addresses to workpeople on subjects connected with health that were delivered last year under the direction of the Committee of the Manchester and Salford Sanitary Association are to be continued at intervals during the present winter, in addition to the series of "Health Lectures for the People," which are to be given in the Association Hall, Peter-street. The first of these addresses was on the subject "How to keep out the Cold," and was delivered on the 7th inst., at the goods yard of the London and North-Western Railway Company, London-road, by Dr. Ransome, lecturer on public health at Owens College. The audience consisted of about 150 workmen.

METROPOLITAN ASYLUMS BOARD.—At the meeting of the Board on the 11th inst. the reports of the Fever and Small-pox Hospitals were presented. These showed that in regard to fever cases in the fortnight, 42 had been admitted to Stockwell, 70 to Homerton, and 14 to Fulham, while 12 convalescents had been transferred to Hampstead. In all 154 fresh cases had been admitted in the fortnight, 21 had died in the same period, and 138 had been discharged, leaving 671 under treatment, as against 652 a fortnight ago. Of the whole number, 506 were scarlet fever cases, 37 were typhus cases, and 123 were cases of enteric fever. In respect to small-pox, only 15 cases had been admitted in the fortnight, 5 had died, and 15 had been discharged, leaving 68 under treatment, a decrease of 9 on the number remaining a fortnight ago.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

ALPIN, WILLIAM, M.R.C.S., L.R.C.P.Lond., has been appointed Senior House-Surgeon to the Metropolitan Free Hospital, vice A. Cohen, M.D., B.Ch., resigned.

ANDREW, WILLIAM, M.B., M.Ch.Ed., has been appointed Medical Officer for the Fourth District of the Launceston Union.

ANNES, F. R., M.R.C.S., has been appointed Junior House-Surgeon to the Metropolitan Free Hospital, vice W. Alpin, M.R.C.S., L.R.C.P.Lond.

ASHE, ST. GEORGE, L.R.C.S.I., has been elected Medical Officer of the High-street Dispensary, South Dublin Union, vice Dr. E. H. Byrne, resigned.

BARR, JOHN, M.B., has been appointed Medical Officer of Health to the Rishton Local Board, Lancashire.

BARR, THOMAS, M.D., C.M., F.F.P.S.Glas., has been appointed Aural Surgeon to the Sick Children's Hospital, Glasgow.

BROWN, J., L.R.C.P.Lond. &c., has been appointed Medical Officer of Health to the Borough of Bacup.

BEATSON, GEO. THOMAS, M.D., C.M., L.R.C.S.Ed., has been appointed Extra Dispensary Surgeon to the Western Infirmary, Glasgow.

BUCKLEY, HENRY CHILD, M.D., C.M.Aber., M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer of Health for the Llanelly Urban Sanitary District.

CAMERON, HECTOR CLARE, M.D., C.M., F.F.P.S.Glas., has been appointed Surgeon to the Sick Children's Hospital, Glasgow.

CAMPBELL, WILLIAM, M.B., C.M., has been appointed House-Surgeon to the Royal Infirmary, Glasgow.

CHRISTIE, JAMES, M.D., F.F.P.S.Glas., has been appointed Dispensary Physician to the Western Infirmary, Glasgow, vice Coats, resigned.

COATS, JOSEPH, M.D., F.F.P.S.Glas., has been appointed Pathologist to the Sick Children's Hospital, Glasgow.

DAVIDSON, JAMES H., M.B., C.M.Ed., has been appointed House-Surgeon to the Royal Infirmary, Glasgow.

DUNN, THOMAS S., M.B., C.M., has been appointed House-Surgeon to the Royal Infirmary, Glasgow.

EVANS, THOMAS, M.D., L.R.C.S.Ed., has been reappointed Medical Officer of Health for the Newquay Urban Sanitary District.

FINLAYSON, JAMES, M.D., F.F.P.S.Glas., L.R.C.S.Ed., has been appointed Physician to the Sick Children's Hospital, Glasgow.

FLEMING, WILLIAM JAMES, M.D., F.F.P.S.Glas., has been appointed Extra Surgeon to the Sick Children's Hospital, Glasgow.

FORSYTH, ROBERT, M.D., M.Ch.Glas., has been appointed Medical Officer for the Birstal District of the Dewsbury Union.

GELLATLY, ANDREW, M.B., M.Ch.Ed., has been appointed Medical Officer for the First District of the Ashton-under-Lyne Union.

GEMMELL, SAMSON, M.D., C.M., F.F.P.S.Glas., has been appointed Extra Physician to the Sick Children's Hospital, Glasgow.

HUDSON, ERNEST, M.R.C.S., L.S.A.Lond., has been elected Junior Assistant House-Surgeon to the Sheffield Public Hospital and Dispensary, vice Mr. H. B. Fletcher, resigned.

HUES, JAMES JOHN, M.R.C.S., has been appointed Medical Officer for the Handsworth District of the West Bromwich Union.

JONES, B., M.R.C.S., L.R.C.P., &c., has been appointed an Honorary Surgeon to the Holloway and North Islington Dispensary, vice Scott, resigned.

LAWRIE, WILLIAM J., M.B., C.M., has been appointed House-Surgeon to the Royal Infirmary, Glasgow.

LEISHMAN, WILLIAM, M.D., F.F.P.S.Glas., L.R.C.S.Ed., has been appointed Physician to the Sick Children's Hospital, Glasgow.

LUCAS, R. CLEMENT, M.B., B.S.Lond., F.R.C.S.Eng., has been appointed Surgeon to In-patients at the Evelina Hospital for Sick Children, vice Mr. W. Morrant Baker, resigned.

MACEWEN, WILLIAM, M.D., C.M., F.F.P.S.Glas., has been appointed Surgeon to the Sick Children's Hospital, Glasgow.

MCNISH, JAMES, M.B., C.M., has been appointed House-Physician to the Royal Infirmary, Glasgow.

MCNIVEN, E. ORR, M.B., C.M.Ed., has been appointed House-Physician to the Royal Infirmary, Glasgow.

NEWMAN, DAVID, M.B., C.M., F.F.P.S.Glas., has been appointed Extra Dispensary Surgeon to the Western Infirmary, Glasgow.

QUENNELL, JOHN COOPER, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer of Health for the Ongar Rural Sanitary District.

REID, THOMAS, M.D., F.F.P.S.Glas., has been appointed Ophthalmic Surgeon to the Sick Children's Hospital, Glasgow.

RENTON, J. CRAWFORD, M.B., L.R.C.P.Ed., L.R.C.S.Ed., F.F.P.S.Glas., has been appointed Dispensary Surgeon to the Western Infirmary, Glasgow.

RICH, A. CRESWELL, M.B.Lond., M.R.C.S., has been appointed Pathologist to the Liverpool Royal Infirmary, vice F. T. Paul, resigned.

SEMPLE, ANDREW, M.B., C.M., has been appointed House-Physician to the Royal Infirmary, Glasgow.

STEWART, CHARLES W., M.A., M.B., C.M., has been appointed House-Physician to the Royal Infirmary, Glasgow.

TUDOR, JOHN, M.R.C.S., L.S.A.Lond., has been appointed Consulting Surgeon to the Dorset County Hospital.

WILLCOCKS, FREDERICK, M.D.Lond., M.R.C.P. & M.R.C.S., has been appointed Assistant-Physician to Charing-cross Hospital.

WILSON, JAMES L., M.B., C.M., has been appointed House-Physician to the Royal Infirmary, Glasgow.

WILSON, WILLIAM MACKNIGHT, M.B., C.M., has been appointed House-Surgeon to the Royal Infirmary, Glasgow.

YOUNG, CHARLES STEWART, L.F.P.S.Glas., L.S.A.Lond., has been appointed Assistant Medical Officer to the Barnhill Hospital, Glasgow, vice Dr. Taylor, resigned.

Births, Marriages, and Deaths.

BIRTHS.

GANGE.—On the 9th inst., at Court-street, Faversham, the wife of Frederick A. Gange, M.D., of a son.

GIBSON.—On the 4th inst., at Stanley House, Blackstock-road, Finsbury-park, N., the wife of J. C. Gibson, L.R.C.P., L.R.C.S., of a daughter.

KIDD.—On the 5th inst., at 60, Brook-street, W., the wife of Percy Kidd, M.B., of a son.

MACCALL.—On the 7th inst., at Hope Bank, Kersal, the wife of William McCall, M.D., of a daughter.

NAISMITH.—On the 9th inst., at Ayr, N.B., the wife of W. J. Naismith, M.D., C.M.Ed., of a daughter.

PHILLIPS.—On the 20th ult., at Cheltenham, Gloucestershire, the wife of A. R. Phillips, L.D.S. R.C.S.E., of a son.

WYNDOWE.—On the 12th inst., at Bathesston Lodge, Bath, the wife of S. Jardine Wyndowe, M.D., Deputy Surgeon-General (retired), of a daughter.

MARRIAGES.

ALLT—NEVE.—On the 8th inst., at St. Botolph's Church, Aldersgate, by the Rev. Alfred R. Clemens, Nathaniel William Allt, L.K.Q.C.P., Surgeon, of Poplar-place, Wittersham, Kent, eldest surviving son of Terence Allt, Esq., Rathmines, Dublin, to Catherine Fanny, eldest daughter of T. R. Neve, Wittersham.

BENTHAM—SHARP.—On the 2nd inst., at St. John's Cathedral, Hong Kong, Robert Bentham, Surgeon, R.N., son of R. Bentham, M.D., of London, to Ellen Lydia, daughter of the late F. Sharp, of Norwich.

POUNDS—LEWIS.—On the 30th Oct., at St. Saviour's, South Hampstead, T. Henderson Pounds, M.R.C.S., L.S.A.Lond., eldest son of Capt. Pounds, R.N., to Katherine, eldest daughter of James Lewis, R.N., of Adelaide-road, N.W.

WARD—TUKE.—On the 13th inst., at St. Mary's Cathedral, Edinburgh, Alfred Ward, M.B., of Anston, co. York, youngest son of William Sykes Ward, of Denison Hall, Leeds, to Emily Elizabeth, only daughter of John Batty Tuke, M.D., F.R.C.P.E., Charlotte-square, Edinburgh.

WYLIE—CLARKE.—On the 7th inst., at Christ Church, Skipton, William Wylie, M.D., L.R.C.P.Ed., of Skipton, eldest son of the late E. Wylie, Esq., of Fourtowns, co. Down, to Edith Jane, youngest daughter of the Rev. W. H. Clarke, M.A., Vicar of Christ Church, Skipton.

DEATHS.

ASKHAM.—On the 9th inst., at Clovelly House, Woking Station, Surrey, Henry Francis Askham, M.R.C.S., late Medical Officer of Her Majesty's Convict Prison, Portland, and formerly of Dartmoor and Woking Prisons, aged 47.

BRICKWELL.—On the 9th inst., at Somersham, Hunts, Henry Brickwell, M.R.C.S., L.S.A.Lond., aged 65.

CROFT.—On the 10th inst., at Bicester, at the residence of his father-in-law, Jonas Paxton, John Henry Croft, M.R.C.S., L.S.A.Lond., aged 42.

DE GRAVE.—On the 13th inst., at the residence of his nephew, Edward Perronet Sells, Morland-road, Croydon, John Francis De Grave, M.D., M.R.C.P.Lond., M.R.C.S., Past Master of the Society of Apothecaries, in his 92nd year.

GOULD.—On the 15th inst., at 16, Queen Anne-street, London, Katie, the dearly-loved wife of Alfred Pearce Gould, F.R.C.S. Eng., aged 27.

KINGSTON.—On the 11th inst., at Church Lawford Rectory, Warwickshire, Peter Nugent Kingston, M.D., late Consulting Physician at Westminster Hospital, aged 77.

NOOTT.—On the 4th inst., at Quay-street, Cardigan, Henry Curtis Nootl, L.R.C.P.Ed., M.R.C.S., aged 33.

N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.

METEOROLOGICAL READINGS.

(Taken daily at 5.30 a.m. by Stewart's Instruments.)

THE LANCET OFFICE, Nov. 16th, 1882.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radiation in Vacuo.	Max. Temp. Shade.	Min. Temp.	Rain fall.	Remarks at 8.30 A.M.
Nov. 10	29·66	W.	41	39	..	52	35	..	Hazy
" 11	29·61	W.	42	39	..	43	36	..	Bright
" 12	30·12	W.	35	34	..	44	30	..	Foggy
" 13	29·98	E.	42	41	..	47	32	·06	Raining
" 14	29·93	N.E.	41	38	..	42	36	..	Overcast
" 15	29·79	E.	39	37	..	43	34	..	Cloudy
" 16	29·69	N.	35	35	..	44	31	·32	Snowing

Medical Diary for the ensuing Week.

Monday, Nov. 20.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; on Tuesday, 9 A.M.
MEDICAL SOCIETY OF LONDON.—8.30 P.M. Dr. Haward will show a Man with Intra-Thoracic Aneurism.—Dr. Frederick Hicks will show Instruments for the Treatment of Intra-Thoracic Abscess.—Dr. Thorowgood, "On the Treatment of Intra-Pleural Effusions."

Tuesday, Nov. 21.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. The following specimens will be shown:—Fatty Degeneration of Walls of Heart; Microscopical Specimens of a New Disease of Lymphatics; Embolus from the Left Auricle of the Heart; Syphilitic Gumma in Wall of Left Ventricle; Testis in the Perineum with Congenital Hernia; Unusual form of Growth in the Bladder; Rickets in a Baboon.

Wednesday, Nov. 22.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.—Skin Department: 1.45 P.M., and on Saturday at 9.15 A.M.
HUNTERIAN SOCIETY.—8 P.M. Mr. Jonathan Hutchinson, "On Certain Diseases allied to Erysipelas."

Thursday, Nov. 23.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2½ P.M.
HARVEIAN SOCIETY.—Harveian Lectures: Mr. Henry Power, "On Ophthalmic Medicine and Surgery in relation to General Practice."

Friday, Nov. 24.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
QUEKETT MICROSCOPICAL CLUB.—8 P.M. Mr. B. W. Priest, "On the Statoblasts of the Fresh-water Sponges."
CLINICAL SOCIETY OF LONDON.—Dr. Cavafy, "On Two Cases of Symmetrical Congestive Mottling of the Skin" (patients will be shown).—Mr. J. E. Adams, "On a Case of Lumbar Nephrectomy for Carcinoma."—Mr. R. J. Godlee, "On Two Cases of Intussusception in Infants treated by Abdominal Section."—Dr. Dyce Duckworth, "On Two Cases of Subcutaneous Rheumatismal Nodes" (one of the cases will be exhibited).

Saturday, Nov. 25.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.

Notes, Short Comments, and Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.
All communications relating to the editorial business of the journal must be addressed "To the Editor."
Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.
Lectures, original articles, and reports should be written on one side only of the paper.
We cannot prescribe, or recommend practitioners.
Local papers containing reports or news-paragraphs should be marked.
Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

DR. DOBELL'S CHANGE OF ADDRESS.

A LARGE correspondence, for which we cannot find room, has reached us on this subject, including a letter from Dr. Dobell himself, to the effect that the profession is a brotherhood, and that the intimation of a change of address by one of its members is to be regarded as an act of social courtesy and a means of preventing inconvenience to patients and their advisers. The objection to it, of course, is that it is liable to great abuse, and to be done in an advertising sort of way. When done by consultants it ought to be strictly limited to professional brethren in the habit of consulting them. The feeling with which Dr. Dobell's card has been received is probably to be explained chiefly by the circumstances that it has been distributed on a very wholesale scale, and to many who were not in the habit of consulting him, and who had not even the pleasure of knowing him. The intimation of a change of address, if restricted severely to those who have a right to be informed, is never resented; where it is resented there must be some deeper explanation.

Mr. C. P. Chittenden will see that we have treated of one of the subjects of his letter elsewhere.

Mr. Jessop (Leeds).—Mr. Barraud, Oxford-street, London, W.

LACTRINE.

To the Editor of THE LANCET.

SIR,—As you have recently handled scientifically the subject of the medium through which the rays of the electric light should pass so as not to injure the eyesight or produce painful sensations, I venture to ask your attention to a new variety of glass, which softens the electric light without diminishing its luminant quantity. This glass is termed "lactrine," and it resembles, almost in the degree of facsimile, the opal gem, being less cloudy and absorbent than the common opal glass, and of a finer and purer quality. A perfect specimen of "lactrine" glass may be viewed in the shop of Messrs. Wolff, tailors, London-bridge, having been recently placed there by the Metropolitan Brush Company. Contrasted with the alabastrine glass, adopted for the most part by the electric companies, this shows to the greatest advantage, and that it has met with favour among electricians, I augur from the fact of its being now exclusively used by the Hammond Company, and this, too, both for arc-lights and for incandescents. Lactrine can be tinted if desired, and as an article of manufacture its prime cost exceeds that of alabastrine by the merest trifle, while it does not require the eye of a connoisseur to decide which of the two is the more artistic and effective, as well as the better protector of the eye.—I am, Sir, yours, faithfully,

The Lactrine Syndicate, 151, Cannon-street, E.C. C. READE.
Nov. 13th, 1882.

CHLORATE OF SODIUM IN STOMATITIS.

To the Editor of THE LANCET.

SIR,—In the concluding paragraph of a paper by Drs. Ringer and Sainsbury, on "the Action of the Salts of Sodium, Ammonium, and Potassium," appearing in your issue of Nov. 4th, the value of chlorate of sodium in ulcerated conditions of the mouth is pointed out. May we crave a few lines to say that its application in this way is not altogether new, as for the last three years we have made chlorate of sodium pastilles, forming one of a series of medicated throat pastilles which we originally prepared at the suggestion of Dr. Prosser James, and which have been exhibited at the Cambridge and other meetings of the British Medical Association and elsewhere. These pastilles, however, have never been brought before the notice of the profession in the advertisement pages of the medical journals, and are consequently but little known.

We are, Sir, yours faithfully,

ALLEN & HANBURYS.
Plough-court, Lombard-street Nov. 15th, 1882.

THE CHOLERA AT MANILLA.

THE following is an extract from a private letter received by a gentleman in Manchester from Manilla, and published in the *Manchester Guardian*:—

"We have had the cholera here in about its worst form, I suppose, since the mortality in Manilla and suburbs alone may be put down at not far from 20,000, or about 10 per cent. of the population. The death-rate got up to 1500 one day, but now, thank God, it has got down to 80 odd, and is diminishing fast. As if this was not calamity enough, we have had a strong typhoon for several days, and last night and this morning two long and nasty earthquakes. It is a sweet country to live in. It has been a perfectly horrible time, worse than the earthquakes of 1880. Trenches have been dug in different places, and the dead buried like carrion. They dug a trench at Santa Luca, and within twenty-four hours had buried 112 bodies in it, three and four deep. We went to the Governor-General about it, and got a stop put to it. These 112 all came from San Miguel. At the Loma there were 702 buried in one day; for a week the death-cart and coffins were going night and day, and the streets were quite deserted. By order, bonfires have been burning in front of every house for more than a fortnight. No men can be got to load lighters or work anywhere. What Chinese or Indians could be caught in the streets were pressed by the *veteranos* into the service of carrying the dead. Provisional hospitals have been opened all round, in which about 90 per cent. of the patients are said to have died."

UNIVERSITY OF BRUSSELS.

WE do not publish the lists of the new graduates of foreign universities.

"INUNCTION IN SCARLATINA."

To the Editor of THE LANCET.

SIR,—As this subject is important, and as so little appears to be forthcoming regarding it, I beg space for a few lines. For about a year I have ceased to prescribe inunctions in scarlatina and in pulmonary diseases. Clinical observation is often misleading—*post hoc propter hoc*; but I fancy that I have observed an aggravation of symptoms after rubbing in oil, and I now object to interfere with the respiratory, excretory, and temperature regulating functions of the skin for reasons similar to those anyone would have against coating over the respiratory surface of the lungs, &c. The skin is an organ as well as the liver or the lungs, and is it not true that dyspnœa, anasarca, and fever may be produced in, say, a frog or a rabbit by simply varnishing its skin?—that radiation of heat is lessened from the surface, say, of a liquid by the superimposition of a thin stratum of oil, and that evaporation from such a surface is diminished by the oil? Does not the interference with the action of the skin (*plus* the disorder of the nervous system) explain the origin of the inflammatory affections of the chest with which we are daily familiar, and the congestions and ulcerations of the duodenum after burns? Does not congestion or inflammation, with exudation and consequent inability of the skin to perform its natural functions, explain scarlatinal dropsy? Why make matters worse by rubbing in oil?

In scarlatina I direct my patients that the whole of the skin be well sponged with a warm, strong solution of borax, which, while it dissolves the epidermis, also, let us assume, renders the virus innocuous, promotes cutaneous respiration and excretion, reduces temperature, and mixes readily with the sudoriparous, and saponifies the sebaceous, matters. After the boracic wash the skin is entirely and thoroughly to be moistened with this glycerine, which promotes an exosmotic current, soothes and relieves the congestion of the skin, and keeps any dry epidermic dust from floating about.

Of a few cases of scarlatina treated on these lines in a small practice I have twice had solitary cases in children of large families in small houses, but in both cases the mothers were diligent and attentive to instructions.

I am, Sir, yours, &c.,

Glasgow, Nov. 9th, 1882. ROBERT WALLACE.

To the Editor of THE LANCET.

SIR,—An observation on inunction in scarlet fever may be interesting to some of your readers. I find inunction is never beneficial to the skin in scarlet fever or any eruptive fever, for any oily substance rubbed into the whole or greater part of the skin clogs its pores and checks its action at once, throwing additional work on the already overworked kidneys, the kidneys being invariably overtaxed in eruptive fever with high temperature. If the skin is left alone, I find it is very seldom that kidney trouble or anasarca follows, and if careful precautions be taken, by the poor as well as rich, the disease will seldom spread.

Chlorine gas, formed by sprinkling vinegar and water upon chloride of lime, makes one of our best disinfectants, and should be plentifully supplied in the infected house.

I am, Sir, your obedient servant,

Sackville-street, Nov. 13th, 1882. JAMES STARTIN.

Mr. Thomas Smith.—We think the "nineteen bottles of lotion at 2s. 6d. each" a weak part of this case, calculated to produce a bad impression on a judge.

Mr. Turner (Norwich).—Yes, if very brief.

SINGLETON'S OINTMENT.

To the Editor of THE LANCET.

SIR,—Will you or any of your readers kindly tell me what Singleton's golden eye-ointment is composed of?—I am, Sir, yours truly,

November 15th, 1882. RUSTICUS.

EXAMINATIONS AT THE ROYAL COLLEGE OF SURGEONS.

THE first Primary Examination for the present session for the Membership of the College was commenced on the 3rd instant, when ninety candidates presented themselves, against ninety-one at the corresponding period last year. The following were the questions on Anatomy and Physiology submitted on the present occasion, when the candidates were required to answer four, and not more than that number, out of the six questions, from 1 o'clock until 3 for Anatomy, and from 4 to 6 for Physiology:—

Anatomy.

1. The skull-cap and the subjacent dura mater having been removed, describe the manner in which you would proceed to take out the brain from the cranial cavity.
2. Describe the course and relations of the inferior vena cava; and enumerate the veins which it directly receives, in their order from below upwards.
3. Describe the ligaments which connect the os calcis with other bones.
4. Describe the external anatomy and relations of the kidney. What appearance does it present on section to the naked eye?
5. Give the dissection necessary to expose the superior profunda artery and its anastomoses.
6. Name the nerves of the larynx, and describe their origin, course, and distribution.

Physiology.

1. Describe the structure and mode of growth of a long bone.
2. Describe the movement of the blood in the capillaries as seen with the microscope; and explain the chief phenomena which can thus be observed.
3. Explain the manner in which ordinary inspiration and expiration are accomplished.
4. Give the functions of the anterior and posterior roots of the spinal nerves, and the evidence on which your statements rest.
5. Explain the terms syncope, apnœa, dyspnœa, asphyxia. How is death produced by asphyxia?
6. What is the composition of milk? Describe the digestion and absorption of its organic constituents.

T. J. H.—The instructions are good and well stated. The initials had better be deleted.

ON TRANSFUSION.

To the Editor of THE LANCET.

SIR,—In a paper on the above subject in to-day's issue of THE LANCET, Mr. Le Page writes: "My special intention is that of supplying the obstetrician with a safe and facile means of transfusing blood after post-partum hæmorrhage, where the diastaltic system is practically dead, and the heart is dynamically incapable of action in consequence of the absence of fluid to act upon."

Are the means he supplies us with both "facile and safe?" I cannot conceive that it is a very facile matter, alone and unassisted, to retain both cannulæ in the veins of the donor and receiver of blood, with one hand, whilst "pressing the ball and releasing the lever" with the other, supposing the operator to have overcome the initial difficulties of opening the two veins and introducing the two cannulæ. The "diverticulum" to arrest the air bubbles, if any be left, in the tubing is ingenious, but surely it may be a source of some trouble in that, in filling the apparatus with the soda solution, it will want some dexterity to empty the branch of the air it originally contained. Again, the diverticulum will be useless as far as arresting air is concerned, unless it can be kept upright, or nearly so, throughout the operation. A serious objection to it is that it would undoubtedly be a focus for coagulation.

Mr. Le Page claims that his instrument measures the quantity of fluid transmitted. Well, so does Aveling's. The mere quantity as expressed in drachms and ounces of the blood or saline fluid introduced into the receiver's vein is not to the point. The operator stops when the patient rallies, or, if he be transfusing, when he finds the donor has given as much as it is safe to lose. It is impossible to predict that the receiver requires so many ounces, or that the donor can give so much.

Mr. Jennings very clearly pointed out (THE LANCET, Sept. 16th and Sept. 23rd, 1882) that the many objections inherent in blood-transfusion, especially in the immediate method, practically disqualifies it for those cases which the accoucheur and the general practitioner most frequently have to face unexpectedly and without any assistance. I fail to see that Mr. Le Page has removed any of these objections; on the other hand, he has introduced to us a complex modification of Aveling's instrument.

All the dynamic effect required for the circulatory system is supplied in the saline-alcoholic fluid of Little (which in this class of cases is the sole effect which is desired), without one tithe of the risks or difficulties of the immediate method of transfusion. The supply, further, is unlimited and always accessible.

It would be interesting to know whether Mr. Le Page has ever used his apparatus in actual practice. The value of the intravenous injection of the saline-alcoholic fluid has been lately exemplified by the case published in THE LANCET on Sept. 16th, 1882, and within the last twenty-four hours it has come to my knowledge that this method has again been carried out with success in another case, at the London Hospital, by means of Jennings's "syphon," the notes of which I hope will appear in due course.

I am, Sir, yours faithfully,

Duke-street, Manchester-square, W., W. H. FENTON-JONES.

Nov. 11th, 1882.

TESTS FOR COFFEE ADULTERATION.

IN a work now in course of publication at Breslau, Professor Wittstein gives details of the tests which he regards as effective in the discovery of false colouring on coffee, such a process being, it is explained, resorted to in order to give to inferior and sea-damaged kinds the appearance of superior descriptions. To detect the presence of lead he recommends the placing of the suspected coffee-beans in diluted nitric acid (of 1·10 specific gravity), which is poured off after one hour, and further diluted with three times its bulk of water. By the addition of sulphide of hydrogen the lead is made to form a black precipitate. Another mode of colouring coffee-beans is said to be by the use of a greenish powder, composed of Prussian blue, chromate of lead, clay, and gypsum. In order to discover the presence of this colouring matter, warm distilled water is poured over a quantity of the coffee-beans. After a couple of hours they are taken out again, and the water is allowed to become clear. If gypsum has been used, the water is rendered turbid by chloride of barium. If Prussian blue has been used, it can be readily traced by applying potash-lye, which immediately changes its colour into brown. If this change does not take place, it may be inferred that indigo has been used instead of Prussian blue, and in that case nitric acid will destroy the colour. During the treatment with potash-lye the chromate of lead is more or less affected, and is partially or wholly dissolved; while if turmeric has been used, it only takes a brown colour. As a further test, hydrosulphuret of ammonia is spoken of as being able to show the presence of chromate of lead if any blackening takes place.

REGISTRATION OF STILL-BIRTHS.

Mr. A. J. Newman.—Our correspondent is under a misapprehension in believing that recent legislation has provided for the compulsory registration of still-births. No entries relating to still-births are made in the national register either of births or of deaths. The Births and Deaths Registration Act of 1874, sec. 40, provides that any person who "wilfully makes, gives, or uses any false statement or representation as to a child born alive having been still-born, or as to the body of a deceased person or a still-born child in any coffin, or falsely pretends that any child born alive was still-born, or makes any false statement with intent to have the same entered in any register of births or deaths, shall for each offence be liable, on summary conviction, to a penalty not exceeding £10, and on conviction on indictment to fine or imprisonment, with or without hard labour, for a term not exceeding two years, or to penal servitude not exceeding seven years."

Endymion.—There is no single work dealing with the principles of preventive medicine, and the information must be gathered from a series of works. As text-books, Parkes' work on Hygiene, together with Wilson's Handbook of Hygiene, are perhaps the best. An excellent list of the works in question is appended to the papers given at the Sanitary Science Examination at Cambridge, and published at the Cambridge depôt, Paternoster-row, E.C.

VICARIOUS MENSTRUATION.

To the Editor of THE LANCET.

SIR,—A peculiar case having occurred of the above nature in the district over which I have charge, I venture to inform you concerning it.

A single woman, aged twenty-six, came to consult me concerning her right eye, which she says "is very dim, and difficult to see out of, especially at night." Upon the inner canthus, close to the entrance of the superior lacrymal canal, was a small papule. The pupils appear normal and the eyes natural, though last month the cornea of the right eye appeared congested. She is a bilious subject, and has loss of appetite, and sickness in the morning. The breasts are small, but fairly well developed. The menstrual flow has never been regular, and if any appears it is very slight and colourless. She does not appear to be plethoric, and the heart sounds are healthy, though she complains of weakness and pain in the frontal region, and always in the right eye.

About the middle of August last profuse hæmorrhage took place from the papule mentioned, and a colleague says "it spurted out as if from a wounded artery." After a pad of cotton-wool with a bandage had been applied over the part and she had gone home, it commenced again, and another medical man was summoned on the same day (Wednesday), who adopted similar treatment, and the bleeding from the eyelid stopped till Friday, but it came on again on the following Monday, in spite of ice, &c. It first began from the right inner canthus, then it occurred from the left inner canthus, of the eyes; then bleeding from the nose and mouth followed.

As it would appear to be a case of extreme rarity to have hæmorrhage in this region "vicarious of menstruation," I have determined to watch the case. I am giving aperients, with ergot and bromide of potassium, and recommend rest and cold applied to the head, as the symptoms threaten to recur. I shall also endeavour to induce normal menstruation from the proper channel as the periods come round. So far my treatment is successful.

I should be glad if any of your readers would inform me of similar cases, and for their opinion concerning this one.—Yours truly,

York, Nov. 1882. G. DE COURCY MORRIS, M.D.

THE POPULATION OF CANADA.

THE above question has been receiving attention in the continental press, with special reference to the difference in the rate of increase of the French Canadians as compared with that which is recorded to be the case in France. It is stated that Canada has a French speaking population of about a million and a quarter who are lineally descended from the Norman and Breton colonists, who numbered not quite 11,000, and who emigrated to Canada during the 150 years of French supremacy in that part of America. Since Canada ceased to belong to France there has been practically no emigration from that country; in fact, there has been a somewhat extensive emigration of French Canadians from Canada to the United States. The French colonists have increased in number from 1,082,000 ten years ago to the present population of 1,298,929 souls, being an augmentation of about 20 per cent.

CELLULOID TRACHEOTOMY TUBES.

To the Editor of THE LANCET.

SIR,—Will you allow me to add my testimony to that of Mr. Green, in your last issue, as to the value of the above. About eight months ago Messrs. Mayer and Meltzer made me one, and I used it in May for a child on whom I performed tracheotomy for diphtheria. It answered the purpose very well indeed, and I have frequently used it since. Being probably the first tube of that material ever made or used, it did not quite meet all the requirements I look for in a tracheotomy tube. In such a case as Mr. Green's it is *par excellence* the tube to use, and the property it possesses of being moulded is an additional advantage. Moreover, in such a case no inner tube is required; but in cases of tracheotomy where there is much expectoration of mucus or membrane an inner tube is generally necessary. In my tube the inner did not glide easily within the outer tube, and was withdrawn with great difficulty, but such a defect is no doubt easily obviated.

After a fairly large experience in tracheotomy, I think the tubes advocated and used by Mr. R. W. Parker by far the best in the largest number of cases. In them the inner tube glides easily within the outer, and is as easily retained; the curve corresponds to the natural curve of the trachea, and it has the collar movement. I am having one of these tubes made in celluloid with such modifications as the nature of the material demands. The difficulty is to get tubes of the largest possible calibre with a maximum of strength and a minimum of general bulk.

I am, Sir, yours faithfully,

J. SCOTT BATTAMS,
Resident Medical Officer, East London Hospital
Nov. 12th, 1882. for Children.

Hypatia.—There is no law to prevent obstetric practice by anyone. The chances are that if such an individual be allowed latitude enough he will come to grief. The address in question is Mr. Carpenter, 130, Stockwell-road, London, S.W.

HOME FOR INVALID LADIES OF LIMITED MEANS.

To the Editor of THE LANCET.

SIR,—We have been requested to draw the attention of your readers to the present opportunity of filling some vacancies in the home for invalid ladies of limited means, which has been established here for the past four years. The object of this institution is to extend the advantages of one or two winters' residence in this climate to such ladies of limited means as may have a fair prospect of recovery and return to an active part in life, and it is thought that the profession will be glad to know of this institution, and will best bring it to the knowledge of those for whom it is intended.

We remain, Sir, yours faithfully,

A. J. FREEMAN, M.D., } Medical Officers to the Home
L. E. KAY SHUTTLEWORTH, } for Invalid Ladies.

San Remo, Italy, Nov. 8th, 1882.

S. H. J. should consult our article in the Students' Number, published on Sept. 9th last.

Herrn Breitkof and Hartel (Leipzig).—We cannot exchange.

POOR-LAW MEDICAL SERVICE AND BOARDS OF GUARDIANS.

To the Editor of THE LANCET.

SIR,—Assistant medical officers under the Poor-law system it appears may be dismissed by Boards of Guardians without the consent of the Local Government Board, they falling under the Consolidated Order 183. Such medical officers should insist on a certain amount of notice when they are first engaged, for, with the above powers, nothing prevents them from only getting twenty-four hours' notice of dismissal. In my case a month's notice was given me, with which I was not satisfied, and refused to accept it. However, the Local Government Board have written and said the guardians have the power so to act. Thinking this information may be of use for future candidates for similar offices, I have taken the liberty of sending it to you.

I remain, Sir, yours, &c.,

Nov. 14th, 1882. ASSISTANT RESIDENT MEDICAL OFFICER.

THE HYGIENE OF CLOTHING.

DR. PAUL NIEMEYER, a member of the Berlin Sanitary Council, lately delivered a lecture on the above subject, and referred to the labours of the English National Health Association as affording an example to Germany and other nations. He disapproved strongly of the theories as to "normal clothing" advanced by Professor Jäger, of Stuttgart, and expressed his opinion that uniformity in clothing was not to be arrived at, but that, as to the question at issue, the principle of individualisation was the most worthy of adoption.

Dr. Fraser (Leyland).—It would perhaps be as well to wait for the treatment adopted to have time to produce its results.

THE THOMPSON FUND.

To the Editor of THE LANCET.

SIR,—We beg to acknowledge the receipt of the following sums of money which have been received in response to the appeal which you were so good as to allow us to make on behalf of the widow and children of the late Dr. Thompson, of Beverley. Mrs. Thompson wishes us to say that she is deeply grateful to those who have so generously aided her in her time of need.

We are, Sir, your obedient servants,

HENRY WALKER, M.D.,
E. D. TOMLINSON, Brigade Surgeon H.P.

Beverley, Nov. 11th, 1882.

Mrs. Nuttall, Bradford	£5	0	0
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A. Hill, Esq., Wilton	2	2	0
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Dr. E. A. Kirby, Beckenham	1	1	0
A Friend	1	0	0
W. W. S.	0	10	0
Dr. Mackie, Bedford	0	10	0
A.M.B., M.A.	0	5	6
K., Taunton	0	4	0

"TESTS FOR ALBUMEN IN THE URINE."

To the Editor of THE LANCET.

SIR,—Dr. George Johnson, in THE LANCET, Nov. 11th, p. 823, alluding to the "Medical Digest," states that picric acid is only mentioned as one of the adulterations of beer. Will you allow me to point to section 249 : 1, where the several uses and therapeutic value of carbozotic vel picric acid and its compounds are noted.

I am, Sir, yours obediently,

RICHARD NEALE, M.D. Lond.

Boundary-road, South Hampstead, N.W.,
Nov. 14th, 1882.

A CORRECTION.

To the Editor of THE LANCET.

SIR,—Permit me to ask a trifling correction of the report of the last meeting of the Pathological Society. The case of Paraplegia was related by my son, Mr. W. H. Kesteven, and not by myself.

I remain, Sir, your obedient servant,

Enfield, Nov. 11th, 1882. W. B. KESTEVEN, M.D.

ERRATUM.—In the last paragraph of Mr. Beattie Bain's letter on "Inunction in Scarlatina," published in our last issue, page 835, for "salicin and carbonate of soda," read "salicin and *sulpho-carbolate* of soda."

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Professor Hamilton, Aberdeen; Professor Owen; Sir G. Burrows, London; Mr. Christopher Heath, London; Dr. Bryce, Toronto; Mr. Fenton-Jones, London; Dr. Wilks, London; Surgeon-General Johnstone; Mr. Burton, London; Dr. Alford, Taunton; Dr. Walters, Reigate; Mr. C. Reade, London; Dr. Kesteven, Enfield; Dr. Wilson Fox, London; Surgeon Flanagan, A.M.D., Barbadoes; Dr. Robert Fowler, London; Mr. F. Thorne, Leamington; Mr. Weekes; Mr. Salmond; Mr. Dolan, Halifax; Mr. G. P. Best, Birmingham; Messrs. Marchant and Son, London; Mr. Shann, Cambridge; Mr. Brito, Aberdeen; Mr. G. B. Sweeting, King's Lynn; Dr. Stanley Murray, Putney; Mr. J. S. Wood, Tooting; Mr. Mackey, Brighton; Mr. Dearden, Church; Mr. Ellerton, Leamington; Mr. Topping, Kingston-on-Thames; Mr. Wallace, Glasgow; Dr. Gentles; Dr. Freeman and Mr. Shuttleworth, San Remo; Dr. Nevins, Liverpool; Mr. S. Eastes, Folkestone; Dr. Styrap, Shrewsbury; Mr. Booth, London; Dr. Blanc, Bombay; Dr. R. Gee, Liverpool; Mr. Ottley, London; Mr. Gaskoin, London; Mr. Krickenball, Colombo; Messrs. Fletcher and Co., Holloway; Mr. Lawson, Huntley; Messrs. Lumley, London; Dr. Seaton, Gunbury; Mr. Cowburn, Cheetham; Messrs. Hayes and Son, Peterboro'; Dr. T. J. Hudson, Leeds; Dr. Walker, Beverley; Mr. Turner, Norwich; Dr. Neale, London; Mr. Lennox Browne, London; Dr. Herbert Page, Redditch; Mr. Calwell, Wellington; Mr. Leonard, Bristol; Mr. Hayward, Whitstable; Mr. Jessop, Leeds; Mr. Battams, London; Dr. Browning, London; Dr. Sargent, London; Dr. Gairdner, Glasgow; Dr. Fowler, London; Mr. Cooper, Holloway; Mr. Kelly, London; Mr. Elridge, Reading; Mr. Rochfort, Chesterfield; Mr. Townsend, Exeter; Mr. Limont, Newcastle-on-Tyne; Messrs. Allen and Hanburys; Dr. Lucas, Ahmedabad; Mr. Clubbe, Tooting; Mr. John Brown, Glasgow; Mr. Thos. Jackson, Whitehaven; Mr. Day, Norwich; Dr. Whittle, London; Dr. Murray Gibbes, Taranaki; W. H.; Carmen; Medicus, Monmouth; Galen; Dr. H. G.; Rusticus; Guy; Puzzled; Inquirens; A District Medical Officer; Endymion; Hypatia; Enquirens; Successful Candidate; G. O. W., Monmouth; W. B.; Dosimetrist; D. C.; B. Z.; &c., &c.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Cuffe, Woodhall Spa; Mr. Horne, Bootham; Messrs. Clarke and Co., York; Messrs. Edis and Co., Huntingdon; Mr. Cooper, Bolton; Mr. Bury, Wrexham; Mr. Phillips, London; Messrs. Fannin and Co., Dublin; Messrs. Curson, Wednesbury; Messrs. Oliver and Boyd, Edinburgh; Dr. Oliver, Bradford; Rev. A. J. D'Orsey; Messrs. Rivington and Sons, Bradford; Mr. Shuttleworth, San Remo; Messrs. Beal and Co., Brighton; Mr. Marriott; Messrs. Stevenson and Travis; Mr. Ryan, London; Mrs. Paxton, Bicester; Mr. Chuter, Isleworth; Mr. Abbs, Dewsbury; Mr. Lovegrove, Nottingham; Messrs. Wyleys and Co., Coventry; Mr. Sampson Gamgee; Messrs. Norman and Co., Exeter; Mr. Maclehose, Glasgow; Messrs. Smith and Son, Dublin; Mr. Ellis, Newcastle-on-Tyne; Mr. Mossman, Brough; Mr. McDougall, Torquay; Mr. Tappinly, Worcester; Messrs. Woolley and Co., Manchester; Dr. Ridge, Enfield; Mr. R. Hetherington, London; Mr. Garrett, Warwick; A. B., South Bank; R. B. M., Redditch; S., Yeovil; A. W.; Superintendent, Seaford; Comes; G. P., Kentish-town; A., Kennington; L.R.C.P., Southwark; A. B., Birmingham; Medicus, Idle; A. B.; Ajax; Lady Superintendent, Great Berkhamsted; House-Surgeon, Ripon; M.P.; Hon. Sec., London; Mrs. A. J., Southbourne-on-Sea; R. W. S., Kirkwall; T. M. C., London; Canula, Manchester; &c. &c.

City and Country, Wigan Observer, West Sussex Gazette, Manchester Examiner, The Argus, Lincolnshire Chronicle, The World, Gardeners' Magazine, North British Daily Mail, Central Somerset Gazette, South Wales Daily News, Sydney Morning Herald, Western Mercury and Somersetshire Herald, Northern Evening Express, Jarrow Guardian, &c., have been received.

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THE WYETH DIALYSED IRON.

Each bottle accompanied with a dropper. A pure neutral solution of peroxide of iron in a colloid form; each fluid ounce contains 27·68 grains. The value of dialysed iron depends upon the proper carrying out of the process of dialysation, and upon the product being perfectly neutral. Preparations will be found in the market called Dialysed Iron which are acid and astringent, and which, in fact, possess none of the properties of a true dialysed iron. Unfortunately, some members of the profession having failed to get good results, owing to such spurious preparations having been supplied, they have naturally been prejudiced against a genuine product. The most careful clinical tests, carried out by Dr. Amory and others, have conclusively proved that the red corpuscles of the blood are rapidly increased under the influence of the Wyeth Dialysed Iron, without being accompanied by the objectionable results that usually follow the administration of other iron salts. Regular size (3 oz., with dropper).

Report of THE LANCET.

"THE WYETH DIALYSED IRON is, of its kind, a perfect preparation, and is often taken without difficulty when other forms are not well borne.

"It is the best antidote in cases of acute poisoning by arsenic."

The MEDICAL PRESS AND CIRCULAR reports:—

DIALYSED IRON.—"The Wyeth Iron has an established reputation, and is a thoroughly reliable preparation; it has steadily gained favour with the profession."

Report of the LONDON MEDICAL RECORD on

THE WYETH DIALYSED IRON.—"This is a neutral solution of oxide of iron in the colloid form, obtained by endosmosis. It has the great advantage over most other preparations of iron that it has no other unpleasant smell or taste, and does not irritate the stomach. It may be given with confidence when other forms of iron disagree. In anæmia and chlorosis it may be regarded as a specific, and in many cases of what may be termed malignant anæmia it is certainly most beneficial. It is the best antidote we possess for poisoning by arsenic."

NOTE.—"It is in itself easily digested, and its administration in all those cases where Iron is indicated, such as General Debility, Chlorosis, Hysteria, Anæmia, accompanied by Fluor Albus or Seminal Weakness, and Tardy Convalescence, Neuralgia, &c., has been followed by the best results."—Professor HAGAR.

THE LANCET.—"The Wyeth preparation is excellent."

Mr. THOS. BRYANT, F.R.C.S., Senior Surgeon of Guy's Hospital, writes:—"I consider it the best, and always prescribe it."

"It has no disagreeable taste or smell, and does not injure or cause any discolouration of the teeth."—JAMES EDMUNDS, M.D., M.R.C.P.

Some Experiments with Lawton's

ABSORBENT COTTON.

BY R. PROSSER WHITE, M.B.,

Senior House Surgeon, Halifax Infirmary, Yorkshire.

ABSORBENT COTTON-WOOL is the product of American ingenuity.

The sample of Absorbent Cotton-wool submitted to my notice was a piece of very finely carded cotton; upon comparing it with ordinary fine cotton-wool one was struck with the white, almost metallic lustre of the former; upon squeezing the absorbent cotton it gives a rough crackling sensation very much like freshly fallen snow when pressed in the hand. This crackling sensation is possessed to a slight extent by medicated cotton-wools, and is a fair test that the wools are fresh and that their absorbent properties have not been deteriorated by exposure to damp and moisture. A familiar experiment with Lawton's Cotton is the readiness with which it sinks in water; ordinary cotton remains floating almost indefinitely. Salicylic cotton possesses the property of sinking rapidly in water, almost equal to the absorbent cotton. If we place these three wools upon oil the absorbent and salicylic cotton sink most quickly, but ordinary cotton-wool in this fluid is not far behind its more absorbent rivals. For glycerine again the absorbent and salicylic wools show a decided affinity and very shortly sink; ordinary cotton remains floating a long while. The amount of water that absorbent cotton will hold in suspension is decidedly greater than either salicylic or ordinary cotton. ℥ss. of absorbent cotton saturated with water and hung up for ten minutes will suspend ℥ij. more water than either of the other two wools of the same weight and placed under the same circumstances. Thick fluids will filter through salicylic absorbent, and ordinary cotton-wool in the following respect—viz., ratio 9 to 13 to 20 in time.

Test.

Remarkable absorbent properties.

From these foregoing experiments this special wool possesses absorbent properties greatly in excess of ordinary cotton-wool, and this not only in crystalloid but also in semi-colloid fluids, and it compares favourably with other wools made absorbent by the suspension of antiseptic or other crystalloid substances in their texture.

Evidence of superiority.

Our next point must be to consider its advantages as a dressing to wounds, and it will at once be admitted that it is a soft, easily applied and comfortable dressing, and one which admits of an equable pressure being applied to the parts: a very important point, and one which cannot be said of all the dry dressings of the present day.

The uses of Absorbent Cotton-wool are, I believe, as follows: It is the best medium for applying remedies in gynæcological cases; it is a valuable medium to apply such medicaments as styptics; it is a useful dressing when equalised pressure is required, and holds a prominent position as a dry dressing to small wounds.—THE MEDICAL PRESS AND CIRCULAR, April 26th, 1882.

OTHER REPORTS ON THE SAME SUBJECT.

This substance differs little from ordinary cotton in appearance, except in its uniformly fine quality and pure white colour; but it has the property of instantly absorbing liquids, so that if a small wad of it be dropped into a vessel of water it becomes at once soaked through and sinks to the bottom.

By reason of this quality, as well as from its exquisite softness, the Lawton Cotton is invaluable as a direct application to discharging surfaces.

Not only in general surgery, but especially in gynæcological practice, the Lawton Cotton has found great favour. For cleansing or making applications to the os uteri or vagina, for absorbing lochial and other discharges, and for other purposes which will readily suggest themselves, this article answers better than any other.

For applying medicated solutions.

By soaking the Lawton Cotton in medicated solutions, and subsequently drying it, we may obtain the effects of many local remedies. Thus we may, by using carbolic, boracic, or salicylic acid, or Labarraque's solution, make it antiseptic. By saturating it with astringents, we may give it this property in any degree, even carrying it as far as to obtain a most powerful styptic.

Mr. THOS. BRYANT, Senior Surgeon, Guy's Hospital, reports:—"One of the most valuable introductions into surgical practice of the present period."

"LAWTON'S ABSORBENT COTTON has been pronounced by some of our most eminent surgeons the very best absorbent for taking up discharges; it is very fine and soft, and acts instantly."—THE MEDICAL PRESS AND CIRCULAR.

"It absorbs moisture with remarkable facility; and, if placed on water, quickly or immediately becomes saturated with it, and sinks to the bottom. It will be found preferable, in many instances, to the ordinary cotton-wool or linen lint for the application of medicated lotions, the dressing of wounds, and for absorbing discharges. This cotton is now largely employed by surgeons both here and in America and on the Continent. Is an excellent preparation."—THE BRITISH MEDICAL JOURNAL.

"LAWTON'S ABSORBENT COTTON is beautifully soft, really absorbent, and quite free from chemicals."—THE LANCET.

An admirably prepared article. It is exquisitely soft and fine. In consequence of its being perfectly cleansed from all impurities, it is so absorbent that when a wad of it is dropped into water it *immediately becomes soaked through*. Valuable to Surgeons and Gynæcologists for taking up discharges or applying medicated solutions."—THE MEDICAL TIMES AND GAZETTE.

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Professor of Chemistry and Toxicology in the Medical College of the London Hospital, &c., &c.

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PROFESSEUR CHEVALLIER,

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(Translated from the French original.)

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